

5. KODIAK ISLAND

(1) This chapter describes Afognak and Kodiak Islands and the numerous smaller off-lying islands which surround their shores. Also described are the various passes and straits leading between these islands, the port of Kodiak, and the numerous other fishing villages.

(2) **Chart 16580.—Kodiak Island** and Afognak Island, close together and separated from the mainland SW of Cook Inlet by Shelikof Strait, are large and have numerous small islands along their shores. The group is about 54 by 155 miles in extent, with its greatest length in a SW direction. The land is rugged and mountainous, with elevations of 2,000 to 3,000 feet along the shores and more than 4,500 feet in the interior. The rocky shores are indented by deep, narrow inlets.

(3) The 1912 eruption of Katmai Volcano, on the mainland 90 miles W of Kodiak, covered this group with a thick deposit of volcanic ash. The effects of the eruption have gradually disappeared and large ash deposits are seen only in a few places.

(4) Kodiak, on Kodiak Island, is the principal business center in the area. Afognak Island, mostly timbered, is a Government forest reserve. Some cattle and sheep are raised, and a few mineral prospects have been located. Salmon canneries operate during the fishing season. The crab, halibut, and herring fisheries also are important; the halibut fleet operates on Albatross and Portlock Banks. The periods of good weather are longer on these islands than on the adjacent mainland, and considerable success has been attained in growing vegetables.

(5) Afognak Island is separated from Kodiak Island by Marmot Bay, Kupreanof Strait, and the passages on either side of Whale Island. These waters provide a direct route from Kodiak Harbor to Shelikof Strait. Kodiak, on the NE coast of Kodiak Island, lies behind the islands in the NW part of Chiniak Bay; one approach is from the N, and the other is from the SE through Chiniak Bay.

(6) **The December 1999 earthquake may have caused bottom uplift in and around all Kodiak Island coastal waters, shoaling and new dangers may exist requiring extreme caution until a complete survey is made of the entire area.**

(7) **Weather, Kodiak Island.**—On Afognak Island the prevailing winds are northeast except in spring and again in late summer when they shift to southwest and west directions. At Kodiak, the winds, usually northwest in late fall, winter, and spring, shift to the northeast in early summer and then to southeast until the end of September. The average wind speed is nine knots at Kodiak, and the area is subject to violent williwaws.

(8) Annual precipitation averages 65 inches (1651 mm) on Kodiak Island, and 53 inches (1346 mm) on Afognak Island. Annual snowfall averages 75 inches (1905 mm) at Kodiak, and measurable snow has been recorded in every month of the year except July and August.

(9) Mean annual temperature is 41°F (5°C) at Kodiak. Extreme temperatures noted were 86°F (30°C) in June (1953) and -16°F (-26.7°C) in January (1989). Water temperatures are about 1°F (17.2°C) lower than air temperatures in summer, and 1° and 2°F (17.2 and 16.7°C) higher in late fall, winter, and early spring. Womens Bay, on the northeast coast of Kodiak Island, is frequently blocked by ice in midwinter.

(10) Fogs are common over the area and are most frequent at Kodiak in June and July. Cloudiness is considerable.

(11) **Chart 16604.—Shuyak Island** appears as part of the N end of Afognak Island, but is separated from it by Shuyak Strait. The S portion is densely wooded, with the higher hills showing bare rocky outcrops. Proceeding N the trees gradually disappear and the N part is entirely grass covered.

(12) **Stevenson Entrance**, the passage between the Barren Islands and Shuyak Island (see chapter 4), is navigable in clear weather. **Kennedy Entrance**, the passage N of the Barren Islands, is generally used if bound for Shelikof Strait from the E.

(13) **Latax Rocks**, the northernmost feature of the Kodiak-Afognak-Shuyak group, are three rocky islets lying in line of the trend of the W coast of Shuyak Island. They are 32, 27, and 20 feet high, respectively, the outer one being the lowest and the most ragged. A rock, which uncovers 7 feet, is about 0.5 mile N of the outermost rock, and a reef, which uncovers 6 feet, is about 0.4 mile W of the outermost rock. Several detached shoals are in the vicinity of Latax Rocks. Ships using Stevenson Entrance should pass N of Latax Rocks. **Latax Rocks Light** (58°41.4'N., 152°29.0'W.), 40 feet above the water, is shown from a tower with a red and white diamond-shaped daymark on the N end of the northernmost rock.

(14) **Current.**—In the vicinity of Latax Rocks it has been noted that the current flows in a W direction on a rising tide and E on a falling tide with velocities reaching about 3 to 4 knots. The current appears to be less in the deeper water in the passage N of Latax Rocks. (See chapter 4.)

(15) **Tide rips** in the vicinity of Latax Rocks are particularly heavy and should be avoided by small vessels. (See caution as to tide rips in the locality of the Barren Islands, chapter 4.)

(16) **Party Cape** is the NW end of Shuyak Island. It is 178 feet high and grass covered for 1 mile or more back.

(17) **Dark Island**, between Party Cape and Latax Rocks, is about 0.8 mile in diameter, 115 feet high, and grass covered. Several large black rocks are off the SW end of Dark Island. **Starr Rocks**, which uncover 6 feet, are between Dark Island and the E part of Party Cape.

(18) Currents observed during one-half day in June on the SW side of Dark Island set W on the flood with a velocity of 1.3 knots. The ebb velocity was 1 knot.

(19) The passage between Latax Rocks and Dark Island has a 5¼-fathom shoal near the middle where the currents and tide rips may appear heavier than elsewhere in the passage. The passage can be used by well-powered vessels by keeping 0.45 mile N of Dark Island on a due E or W course, with careful attention to the set from the strong currents.

(20) **Dark Passage**, between Starr Rocks and Party Cape, may be navigated by keeping 0.4 mile off the cape and passing N of a rock 3 feet high lying 0.9 mile WNW of Party Cape. Because of the strong currents and heavy tide rips, the passage should be avoided.

(21) Shag Island and the W coast of Shuyak Island are described later in this chapter.

(22) The N coast of Shuyak Island from Party Cape to Point Banks is very irregular and fringed with numerous rocks and islets. Heavy currents and tide rips are found along this coast. **Carry Inlet** and **Shangin Bay**, the main indentations, are narrow and tortuous. They may be used only by small craft with local knowledge. Carry Inlet has its entrance channel about 2 miles SE of Party Cape. The narrowest part of Shangin Bay, 1.2 miles from

its entrance, has a midchannel rock which is awash at minus tides.

(23) **Perevalnie Islands**, 95 feet high and grass covered, are close to the N shore of Shuyak Island and 0.5 mile W of Point Banks. **Perevalnie Passage**, between the islands and the mainland, may be used as a boat passage with a depth of about 5 feet.

(24) Temporary anchorage during S weather appears feasible 1 mile WSW of the W end of Perevalnie Islands.

(25) **Point Banks**, an island about 0.4 mile long, and 130 feet high, is entirely grass covered. The narrow passage between it and the NE end of Shuyak Island has several rocks and is choked with kelp.

(26) **Sentinel Island**, a rock 33 feet high 0.9 mile NW of Point Banks, is a good landmark from the E or W. Its sides are nearly vertical.

(27) Fronting the E coast of Shuyak Island, 1.5 to 3.5 miles offshore, are a series of reefs and rocks separated by broken bottom areas and extending 7 miles in an approximately true S direction from a 2½-fathom reef, 1.4 miles SE of Point Banks, to the vicinity of a bare rock 52 feet high. A similar series crosses the former in the latitude of Sea Otter Island.

(28) **Routes**.—Vessels using the passage along the E coast of Shuyak Island, inside the series of reefs and rocks, should proceed with caution. The bottom in this passage is extremely broken. It is considered that only a wire-drag survey would prove the absence of all dangers. The known dangers may be avoided by rounding the SE end of Point Banks Island by 0.5 mile until the E end of the island bears true N. Then proceed 5.8 miles on course **175°** until the prominent group of rocks, highest 15 feet, are a little less than 0.8 mile to the W, then steer **205°** into Perenosa Bay. Tidal currents are very strong.

(29) The main approach from seaward to Andreon Bay, Shuyak Strait, and Perenosa Bay, is S of the rocks SE of Sea Otter Island and between the 52-foot bare rock and Seal Islands, but its use by large vessels cannot be recommended. Indications of shoals along the approach are numerous, but they have not been examined with the wire drag. There are evidently pinnacle formations in this region. To avoid the known areas of extreme broken bottom, steer course **282°** from seaward, pass 3.2 miles N of Tolstoi Point, then 1.9 miles S of the large rock, 52 feet high, lying SW of Sea Otter Island, and then pass 1.5 miles N of the sharp black rocks N of Posliedni Cape.

(30) **Sea Otter Island**, 7.5 miles SE from Point Banks, is grass covered, 0.4 mile long, and 105 feet high. Bare rocks and breakers extend to the E and SE for 2.3 miles.

(31) **Little Fort Island**, 85 feet high, off the E coast of Shuyak Island and 8 miles S of Point Banks, is grass covered and marks the entrance to Andreon Bay. **Big Fort Island** forms the S side of the bay. **Big Fort Channel** separates the island from the mainland. This channel bares at half tide. Anchorage for small boats may be had in **Andreon Bay** near the entrance to Big Fort Channel in 12 fathoms, muddy bottom. The axis of the entrance channel is a little less than one-third the way from the NE end of Big Fort Island to Little Fort Island, it then follows the rounded N end of Big Fort Island about 350 to 400 yards offshore.

(32) Shuyak Strait has a navigable entrance at its W end and is described later in this chapter.

(33) **Perenosa Bay**, on the N side of **Afognak Island**, is between the E entrance to Shuyak Strait and **Posliedni Point**. The NW part of the bay is foul. Anchorages may be found in several

arms of Perenosa Bay, but the approach to the bay from seaward is characterized by a very broken bottom, as described above.

(34) **Delphin Bay** is the W one of the S arms of Perenosa Bay. The channel W of tree-covered **Delphin Island** is foul. Rocks are in the center of the passage E of the island, and the best water is 270 yards off the E points of Delphin Island. Boats can anchor in 16 fathoms, hard bottom, in the center of the head of the arm, after passing the island. A heavy swell comes into Delphin Bay in N weather.

(35) **Discoverer Bay**, the SE arm of Perenosa Bay, has excellent anchorage in 15 fathoms, muddy bottom, E of **Discoverer Island**, which is tree covered and northernmost in the bay. A 3¼-fathom shoal is about 0.5 mile NW from the E entrance point, and a 1-fathom spot is between the shoal and the point. Small boats can enter the channel on the W side of the island and go to the head of the arm. Two mooring buoys are in the SE part of Discoverer Bay.

(36) **Pilotage, Kodiak Island**.—Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See Pilotage, general, indexed as such, chapter 3, for details.)

(37) The Kodiak Island area is served by the Alaska Marine Pilots and Southwest Alaska Pilots Association.

(38) Vessels using Southwest Alaska Pilots Association pilots and en route to Discover Bay can meet the pilot boat about 2 miles N of Posliedni Point (**58°26.0'N., 152°20.0'W.**).

(39) The pilot boat can be contacted by calling "DISCOVERER BAY PILOT BOAT" on VHF-FM channel 16 or on a prearranged frequency between pilot and agent/vessel.

(40) **Phoenix Bay**, the arm of Perenosa Bay just W of Posliedni Point, is a good anchorage for all weather except NW; anchor in 10 to 17 fathoms, muddy bottom, 1.2 miles from the entrance. **Shields Point** forms the W entrance of the bay.

(41) **Seal Bay**, in general, extends from Posliedni Point to **Tolstoi Point**. From a point 1.1 miles N from Posliedni Point a series of rocky islands and reefs extend in an ESE direction across Seal Bay. Navigation in this area should not be attempted without local information.

(42) **Tonki Bay**, on the W side of Tonki Cape, has two arms separated by a headland. A 106-foot rocky islet is 0.5 mile N of the headland. Three rocks awash are about 0.3 mile from the E shore and 2 miles S of Tonki Cape. Anchorage is about 0.3 mile from the head of the E arm in 10 fathoms, soft bottom, but it is not secure with N winds. Small boats may anchor in the small cove on the E side of the head of the E arm in 8 fathoms, muddy bottom, in any weather.

(43) The W arm of Tonki Bay extends 6.5 miles S of the headland separating the two arms. Anchorage may be had in 18 fathoms, muddy bottom, about 0.3 mile from head of the arm.

(44) On the E part of Afognak Island is a series of mountain ridges with low depressions between them running through the island from N to S. From a distance Marmot Island appears as the easternmost of these ridges. The lower parts of Afognak Island are wooded, except its E coast, and its SW end S of Paramanof Bay.

(45) **Caution**.—In making Tonki Cape or Marmot Strait from the N, a very irregular set to the W has been experienced. In foggy weather a vessel is liable to be too close to the breakers off Sea Otter Island unless precautions are taken. Likewise in running to this locality from Seward, abnormal set has been experienced. From the experience of a survey vessel making these runs

and in lying-to offshore, there seems to be two factors for which allowance should be made. First, if the run is made during the time of a flood spring tide, extra allowance should be made for set to the W. Second, if the course of the vessel passes over a bank or even a locality where the water is shoaled, extra allowance for a stronger current should be made.

(46) **Tonki Cape**, the NE end of Afognak Island, is a narrow grass-covered point 87 feet high near its N extremity. A low-lying gap connects it with the ridge separating Tonki Bay and Marmot Strait. A short reef extends N from the cape 0.3 mile, terminating in a rock awash at high water. It is recommended that vessels clear the N end of the cape by at least 1.5 miles. **Tonki Cape Light** (58°21.1'N., 151°59.2'W.), 75 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark.

(47) **Sealion Rocks** are two bare rocks close together, the larger about 35 feet high, about 5.5 miles E from Tonki Cape and 4 miles N from Marmot Island. A reef that uncovers 7 feet is 0.6 mile NE from these rocks. Sealion Rocks have been used as a bombing target.

(48) **Marmot Island**, about 6.5 miles long, parallels the E side of Afognak Island. Marmot Island is wooded to a height of about 500 feet. The N end is low and rises gradually to the highland. The E side and S end of the island are bluffs over 1,000 feet high in places. The W shore is also steep but lower. Three high rocks are close to **Marmot Cape**, the S end of the island, and two more are close to its SE side.

(49) The SE shore of Marmot Island is a Steller sea lion rookery site. There is a 3-mile vessel exclusionary buffer zone around all but the NW shore of the island. (See **50 CFR 223.202**, chapter 2, for limits and regulations.)

(50) Shoal areas adjacent to the NW shore of Marmot Island extend N toward Sealion Rocks and border the N approach to Marmot Strait. A 4-fathom spot in this area is 2 miles off the N end of Marmot Island.

(51) The point on the NW shore of Marmot Island, 1.5 miles from the N end, is marked by a rock, 12 feet high, 600 yards offshore.

(52) Two covered rocks, on which the sea generally breaks, are about 1 mile apart and 2.5 miles E of **Cape St. Hermogenes**, the E end of Marmot Island. The N rock lies in the bearing 288° to the N end of the island. The S rock lies in the bearing 225° to the SE end of the island. Two pinnacle rocks close to the SE side of Marmot Island bear 232° when in range, the range passes SE of both breakers. A vessel should pass over 2 miles outside the breakers to avoid broken bottom.

(53) **Marmot Strait**, between Afognak and Marmot Islands, is 2.5 miles wide at its narrowest part. The strait is apparently free from dangers except along the shores. A shoal of 1¼ fathoms is 650 yards off the W shore of Marmot Strait, 6 miles from Tonki Cape. A midchannel course through the strait is recommended. Tidal currents have an estimated velocity of 1 to 3 knots, the flood setting N through the strait.

(54) **King Cove**, 6 miles W of Marmot Cape, is an open bight 1.5 miles long, indenting the coast 1.8 miles. It may be used as a temporary anchorage in 7 to 12 fathoms, sand bottom. It is exposed to E and S weather.

(55) The W coast of Marmot Strait for about 5 miles S from Tonki Cape is broken and rocky, with reefs extending offshore. Along this stretch is a low bluff with a grass- and muskeg-covered plain, extending 0.3 mile inland to the main

ridge which rises abruptly. S to King Cove the bluffs increase in height with the shores steep-to. From King Cove to Pillar Cape the shoreline is a steep, bare bluff from 500 to 1,000 feet high.

(56) **Charts 16594, 16576.—Marmot Bay** extends W between Afognak and Kodiak Islands to Whale Island. In the center of the bay, near the entrance and N of The Triplets, in places the bottom rises abruptly from deep water to 14 to 17 fathoms. These areas should be avoided because there may be less water than indicated.

(57) The route from Marmot Strait to Kodiak is E of the broken bottom in the center of Marmot Bay entrance. However, shoal spots exist along this route E of Spruce Island and in the vicinity of Spruce Cape.

(58) The route in Marmot Bay from the vicinity of Marmot Strait to the passes at Whale Island lies between the general broken ground in the center of the bay and the N shore. Pillar Cape may be rounded at 1.5 miles in depths of 20 fathoms or more. Similar depths exist 0.8 mile off Cape Izhut. In the W end of Marmot Bay danger will be avoided by keeping well E of a line between the E end of Cape Kostromitinof and Stripe Rock, and E of this line extended S until Hog Island is open from the NW side of Whale Island.

(59) The route along the S side of Marmot Bay through Narrow Strait and Whale Passage is generally used by vessels from Kodiak bound for Shelikof Strait. Passage at the time of maximum current in Whale Passage should be avoided. Current predictions for Whale Passage may be obtained from the Tidal Current Tables.

(60) **Pillar Cape**, the outer end of the N shore of Marmot Bay, is a bluff over 500 feet high, similar to the SE side of Marmot Island. A high pinnacle rock is at the foot of the bluff, 0.5 mile E of the S end of the cape. About 1.5 miles W of the cape is an open bight from which lowland extends through to the W arm of Tonki Bay.

(61) **Izhut Bay**, a N arm of Marmot Bay, is about 5 miles wide between Pillar Cape and Peril Cape and extends about 7.5 miles in a NW direction. The only dangers are along the shores and in the arms of the bay. The bay proper is exposed to S weather, but some of the arms afford protected anchorages.

(62) The most important of these anchorages is **Kitoi Bay**, an arm on the W side. Its head is a landlocked basin about 0.5 mile in diameter. The swinging radius from the center of the basin is about 300 yards. To enter Kitoi Bay pass the N entrance point of this arm slightly less than 0.5 mile off on a course **305°**, picking up the range defined by the prominent point on the N side about 1.8 miles in and the stream at the head of the small bight at the head of the arm. Continue on course or range until 0.3 mile from **Midarm Island**, a small prominent midbay island, 50 feet high. This position is between another islet 600 yards to starboard and a 3-fathom spot 125 yards to port. The islet on the starboard beam is 100 yards from the N shore. The 3-fathom spot is marked by only a few streamers of kelp which are difficult to see. Then change course to pass S of the islet and steer midchannel course to the center of the basin which is clear to within a few yards from shore. A low-water spit extends a few yards off the N entrance point of the basin. Anchor in 20 to 22 fathoms, good holding ground. Small vessels may anchor in a small bight SW of the basin in 11 to 12 fathoms.

(63) Two fingerlike arms in the NE part of Izhut Bay extend N about 5 miles. **Saposa Bay**, the E arm, has an island about 0.5

mile from its entrance. A rock, covered $\frac{1}{2}$ fathom, is about 125 yards S of the island. The passage is W of the island. The controlling depth is 2 fathoms. Small vessels may anchor above the island in 7 to 10 fathoms, sand bottom. The W arm is not recommended as an anchorage.

(64) **Peril Cape**, the outer end of the W shore of Izhut Bay, is a prominent precipitous headland about 600 feet high with a high pinnacle rock close to its S side.

(65) **Cape Izhut**, 2.5 miles SW of Peril Cape, is a projecting, long, wooded, hilly point from 250 to 500 feet high. There is deep water around the cape as close as 0.3 mile.

(66) **Duck Bay** is about 6 miles long from Cape Izhut to Cape Kostromitinof. At the E end of the bay temporary anchorage, with a swinging radius of about 300 yards, may be had in the middle of the cove 1.5 miles NW of Cape Izhut, in 6 to 7 fathoms. The anchorage is E of an islet, 16 feet high, 0.3 mile from the N shore and should not be approached closely. **Selezen Point** forms the W side of the cove.

(67) A round, rocky island, 168 feet high and grass covered on top, is 2.5 miles W from Cape Izhut and 0.6 mile from shore. Kelp extends nearly 0.3 mile W and N of the island, and numerous bare rocks extend 0.5 mile E of the island and to the shore NE of it. On **Selezen Bay**, the cove N of the island, is the small native settlement of **Little Afognak**. Temporary anchorage may be had in the middle of the cove in 10 to 12 fathoms. Enter the cove W of the island between the island and a large rock awash at high water, which lies 0.3 mile S from the W point of the cove.

(68) **Mary Anderson Cove**, the next cove W, with its entrance 1 mile NW of the 168-foot island, is 1 mile long and 0.7 mile wide. The bottom is rocky and kelp extends some distance from shore in places. Small craft entering with care can anchor in 5 to 8 feet at the head.

(69) **Cape Kostromitinof**, on the N shore of Marmot Bay, is a projecting, long, level, wooded point, about 200 feet high, with bluffs in places at the water. N from the cape the land rises gradually in a distance of 5.5 miles to **Duck Mountain**, a prominent peak, 2,048 feet high.

(70) **Kazakof Bay**, referred to as **Danger Bay** by local fishermen, extends 6 miles in a N direction from the NW part of Marmot Bay. Anchorage for small vessels is found at the head of the bay. (See Routes, Kazakof Bay.)

(71) The cove on the E side, 3.5 miles above the entrance to Kazakof Bay, affords shelter for a small vessel anchored in 12 to 14 fathoms. Small craft can anchor in the SE end of the cove in about 5 fathoms. A reef extends about 100 yards off the S side of the entrance. The small bight in the E shore is shoal. In 1981, a logging camp was operating on the E side of the cove.

(72) **Parrot Island**, round, rocky, and 70 feet high, is in the entrance to Kazakof Bay. Channels for entering are on either side of the broken ground on which Parrot Island and other rocky islets and rocks awash are grouped. A submerged ledge with some kelp and a depth of $3\frac{1}{2}$ fathoms is about 0.8 to 1.5 mile SE of Parrot Island; its N end is 0.5 mile off Cape Kostromitinof.

(73) **Stripe Rock**, 2.8 miles S of Parrot Island, is marked by a prominent white streak which extends along the entire height of the rock. It is composed of two pinnacles close together, about 35 feet high; the white streak is on the higher of the two pinnacles. A large bare ledge, 30 feet high, is between Stripe Rock and Parrot Island.

(74) W of Stripe Rock and the large bare ledge, the area extending to the shore is mostly foul and should be avoided by vessels.

(75) **Routes, Kazakof Bay.**—From E, shape the course for a position about 0.5 mile S of Cape Kostromitinof. Head for Parrot Island on a **305°** course until the SW end of the cape is a little forward of the beam. Change to **330°** and pass 0.25 mile off the SW end of the cape and the same distance NE of Parrot Island.

(76) Then steer **359°**, with Parrot Island astern, to the head of the bay. Above Parrot Island, give the shores a wide berth and avoid the low bare rock about 0.4 mile from the E shore and about 0.6 mile from the head of the bay. The anchorage is about 0.4 mile W of this rock in about 18 fathoms, mud and gravel bottom. The head of Kazakof Bay separates into two arms. Small vessels can anchor in 8 to 10 fathoms, either in the broadest part of the W arm 0.3 mile from its head, or in the entrance to the E arm.

(77) From SW, keep Hog Island open from the NW side of Whale Island until Stripe Rock is in range with the E side of Cape Kostromitinof. Then steer **041°** for 2.3 miles to a position 0.25 mile E of Stripe Rock. Then steer **006°** for 1.1 miles to a position 0.25 mile E of a bare ledge about 15 feet high. Then steer **333°** for 0.9 mile. Then steer **358°** for 0.8 mile, keeping Stripe Rock open W of the bare ledge astern until Parrot Island is 0.5 mile on the starboard beam. From this position a **005°** course will lead to the head of the bay.

(78) **Afognak Bay**, the W tributary to Marmot Bay, makes into Afognak Island about 3.5 miles. There is secure anchorage off an abandoned cannery at **Rivermouth Point**, near the head. (See Routes, Afognak Bay.) **Litnik** is an abandoned village on **Afognak River** at the head of the bay. The approach from Marmot Bay is through **Eastern Passage**, between Hog Island and Big Rock, which are off Afognak Bay. This approach is endangered by a rock awash, marked by a buoy, 0.6 mile SE of Big Rock. Foul ground marked by kelp extends about 350 yards from Hog Island into Eastern Passage, and shoal water extends about 0.3 mile SSW of Big Rock.

(79) A straight channel, bordered by dangers, leads from Eastern Passage to the central part of Afognak Bay. On the NE side of the channel are the Skipwith Reefs, with shoal water projecting channelward. On the SW side are **Danger Reef**, which uncovers about 5 feet. An unmarked $3\frac{1}{4}$ -fathom shoal is 0.9 mile SE of the reef. A rock, covered $2\frac{1}{4}$ fathoms, is 0.6 mile NW of Danger Reef.

(80) **Hog Island** is the prominent mark for approaching Afognak Bay and also Afognak Strait. It is 0.4 mile long and has two wooded knolls with a saddle in between.

(81) **Hog Island Light** ($58^{\circ}00.1'N$, $152^{\circ}41.2'W$), 40 feet above the water, is shown from a square frame with a red and white diamond-shaped daymark on the S side of Hog Island.

(82) **Big Rock**, 1 mile from Hog Island with Eastern Passage between, is comparatively narrow, irregular, and 100 yards long in a N and S direction.

(83) **Skipwith Reefs**, a chain of bare rocks and reefs, extend about 2.5 miles NW from the rock awash in Eastern Passage to Lamb Island. The SW side of the rocks should be given a berth of over 0.4 mile.

(84) **Lamb Island**, 0.5 mile long and wooded, is near the point which marks the outer end of the E shore of Afognak Bay. The area between the point that marks the outer end of the E shore of the bay and Lamb Island is foul and should be avoided.

(85) **Alexander Island**, 0.8 mile E of Lamb Island, is grass covered and has a knob about 80 feet high at its N end. Foul ground surrounds the island and extends 1.2 miles toward Stripe Rock.

(86) **Dot Island**, small and wooded, is the westernmost of three small islands close to **Posliedni Point**, where Afognak Bay narrows to 0.5 mile. On the W shore opposite Dot Island is a cascade where water can be obtained by boat.

(87) **Graveyard Point** marks the outer end of the W shore of Afognak Bay; **Lipsett Point** is the next point inside the bay. **Aleut Village** is on the shore of the bight between these points.

(88) **Village Reefs**, partly bare at low water and covered with kelp, extend over 1 mile E from the shore around Graveyard Point toward Hog Island. The point of the reefs is midway between Graveyard Point and Hog Island. SE from the point of the reefs is a detached shoal with a least found depth of $3\frac{1}{2}$ fathoms. Between this shoal and the reef extending 650 yards W from Hog Island is a channel 0.5 mile wide. The channel is sometimes used by vessels, with local knowledge, to enter Afognak Bay from Afognak Strait.

(89) **Head Point** is 1.4 miles S of Graveyard Point, and between these points is the former village of **Afognak**, whose inhabitants moved to Settler Cove in 1965. The white church with green roof, 0.3 mile S of Graveyard Point, is the best mark in the village.

(90) Small vessels can anchor in 5 fathoms near the kelp on Village Reefs, with the church in Afognak bearing 344° and Head Point in line with Deranof Rock. Little current will be felt here, but there is exposure to E winds.

(91) **Routes, Afognak Bay.**—From NE, keep Hog Island open from the NW side of Whale Island, bearing anything W of 250° ; this range will lead about 0.3 mile SE of the rock awash 0.6 mile SE of Big Rock. After Big Rock appears in range with the E end of Lamb Island, turn to pass midway between Big Rock and Hog Island, and steer 315° for the old cannery building at Rivermouth Point, showing midway between Dot Island and Posliedni Point. Keep this range for about 2 miles until the W end of Lamb Island is abeam. Then steer 308° for 1.8 miles and pass 400 to 500 yards S of Dot Island. Keep this course for about 0.3 mile past Dot Island until 0.25 mile off the cascade on the W shore. Then steer 353° for 0.8 mile, favoring slightly the W shore. Anchor near midchannel off the old cannery at Rivermouth Point in 8 to 10 fathoms. The anchorage is clear if **Winter Island**, in the W arm, is given a clearance of 300 yards and **Last Point**, on the N shore, 400 yards.

(92) From S steer 359° , with Big Rock and the SW end of Alexander Island on range ahead, to pass E of Hog Island. When the N end of Hog Island is abeam, turn from the range to pass midway between Big Rock and Hog Island.

(93) **Whale Island**, at the W end of Marmot Bay, is about 4 miles in diameter. Its S half is a grass-covered mountain, 2,028 feet high, with a narrow light streak down its E slope. The N side of the island is low, and the lower parts of the island are generally wooded. **Treeless Islet**, rocky and grass covered, is 0.4 mile off the E side of the N end of the island. Whale Passage and Afognak Strait are S and N of Whale Island, respectively.

(94) **Afognak Strait**, between Whale and Afognak Islands, is used mostly by small vessels.

(95) The currents in the strait are only half as strong as in Whale Passage. The dangers are marked by kelp, which grows in depths up to about 6 fathoms and shows at slack water.

(96) If precaution is taken, navigation is not difficult on a clear day when the marks for the strait can be seen, and when the summit of Kupreanof Mountain is not hidden. The range formed by this mountain peak and Deranof Rock, off Deranof Island, effectively marks the channel through Afognak Strait, except in the central part of the strait and just inside the W entrance. In the central part of the strait the range passes close to the edge of foul ground making out from the N shore; here a vessel should guard against going anything N of the range. Just outside the W entrance, a $2\frac{1}{2}$ -fathom depth on a rock lying 600 yards from the Whale Island shore is on or a very little N of the range. The channel is just S of the rock, and here it is necessary to deviate a little S of the range to avoid the rock; the channel is only 300 yards wide between the $2\frac{1}{2}$ -fathom rock and the reef making out from Chiachi Point; the general depth is 24 feet.

(97) A reef awash is 0.4 mile NNW from Chiachi Point or 400 yards N of Kupreanof Mountain-Deranof Rock range.

(98) Most of the N half of Afognak Strait is foul. SW of Head Point the foul ground extends 0.3 mile offshore and its S edge is near the Kupreanof Mountain-Deranof Rock range.

(99) **Dolphin Point** is the NE end of Whale Island. A reef, partly bare at low water, extends 600 yards from Whale Island at a point 0.3 mile W of Dolphin Point.

(100) **Fox Bay**, the bight in Whale Island 1 mile W of Dolphin Point, has in its entrance a reef which uncovers at low water. A small vessel can anchor in the bay inside the reef in 4 to 5 fathoms, but the S shore must be given a berth of 300 yards.

(101) W of Fox Bay the shore of Whale Island is clear to **Chiachi Point**, the NW end of the island, from which a shelving reef makes out about 350 yards in a NW direction.

(102) Temporary anchorage may be had in the channel of Afognak Strait between Fox Bay and former Afognak village, in 7 to 8 fathoms, but exposed to the full strength of the currents and to E and N winds.

(103) A good anchorage in Afognak Strait, but exposed to E weather, can be had in 5 to 7 fathoms about 400 yards off a gravel beach on the SE end of Little Raspberry Island. The bottom is sand and gravel and the anchorage is suitable for large or small vessels. To make this anchorage from the E, hold a 270° course with the S end of Little Raspberry Island ahead. The end of this island can be recognized as the N side of the passage N of Deranof Island. Remain on the bearing 270° on the S end of Little Raspberry Island in order to avoid foul ground off Shoal Point and to avoid a rock S of this course which uncovers 1 foot. This rock is marked by kelp which tows under at most stages of the tide. If this course is used coming into this anchorage, or for small vessels in The Narrows, it is possible to select a good range for this course, with the S tip of Little Raspberry Island against the slope of a mountain on Raspberry Island near Last Timber Point.

(104) With E winds, small vessels can anchor in about 4 fathoms about 0.3 mile W of **Afognak Point**, on the N side of Afognak Strait; caution is required. When rounding into the anchorage, pass NE of a reef, bare at low water, 0.4 mile SW of the point; give the point a berth of over 300 yards.

(105) **Deranof Island**, 0.5 mile long, low and wooded, is the southernmost and largest of the islands at the W end of Afognak Strait.

(106) **Deranof Rock**, about 15 feet high, is nearly 200 yards S of the island. Broken ground with a least depth of $2\frac{1}{2}$ fathoms is 0.4 mile E of the island and 074° from Deranof Rock.

(107) **Tides, Afognak Strait.**—High and low water occur about ½ hour later than at Kodiak. The diurnal range of tide is about 10 feet.

(108) The **tidal currents** in Afognak Strait set W on the flood and E on the ebb. The estimated velocity is 2 to 5 knots at strength, depending on the range of the tide. During the flood there is a strong set into Raspberry Strait; this should be kept in mind when in the W end of Afognak Strait.

(109) **Routes, Afognak Strait.**—From E in Marmot Bay, keep Hog Island open from the NW side of Whale Island, bearing anything W of **250°**; and pass 0.25 mile or more S of Hog Island and 0.5 mile N of Dolphin Point.

(110) Passing 0.5 mile NW of Dolphin Point, steer for Deranof Rock in range with the summit of Kupreanof Mountain; or if the mountain is obscured, steer for Deranof Rock with the S end of Hog Island astern, course **253°**. Off Head Point and for 0.8 mile to the W, go nothing N of the range. When approaching the W end of the strait, keep a little S of the range to avoid the rock with 2½ fathoms over it; but give the shore of Whale Island a berth of over 300 yards; on the flood, guard against a N set toward Raspberry Strait.

(111) When the E one of the two highest peaks on the S side of Whale Passage opens W of Whale Island, bearing **184°**, steer **238°** and pass 0.25 mile SE of Deranof Rock. Continue the course 0.8 mile past the rock, and then steer **286°** with the summit of Whale Island astern. This course made good will lead through Kupreanof Strait, passing 0.4 to 0.5 mile S of Gori Point, 0.9 mile N of Outlet Cape, and 0.5 mile S of Malina Point.

(112) Raspberry Strait is described later in this chapter.

(113) **Raspberry Island**, extending from Shelikof Strait to Afognak Strait, is about 15 miles long in a NW and SE direction, and averages about 5 miles wide. On the NE side it is separated from Afognak Island by Raspberry Strait, and Kupreanof Strait borders its SW side. This island is rugged and mountainous with elevations up to 2,350 feet. Most of the shores are bold and precipitous except where numerous valleys meet the shore. The island is grass-covered except along the Shelikof Strait side, where it is for the most part bare sheer cliffs, and along the SE half of Raspberry Strait where the island is heavily covered with spruce.

(114) The description of features along the various shores of this island is given in connection with the information pertaining to Kupreanof, Raspberry, and Shelikof Straits.

(115) **Whale Passage**, S of Whale Island, joins **Kupreanof Strait** to form a part of the main route between Kodiak and Shelikof Strait. Strong tidal currents occur in Whale Passage. Eddies may cause vessels to veer toward danger. The S shore of Whale Passage is foul with rocks and kelp; the N shore is generally clear of obstructions. The islands bordering both sides of Kupreanof Strait are grass covered and mountainous, especially the N shore which rises abruptly. The timber extends W along the shore to Last Timber Point and Dry Spruce Island, where it terminates except for scattered clumps. Navigation in the daytime is not difficult when the current is not too strong; however, careful attention to steering is required under any condition.

(116) **Ilkognak Light** (**57°54.8'N.**, **152°47.0'W.**), 18 feet above the water, is shown from a skeleton tower, with a square green daymark in the middle of the E entrance to Whale Passage. Broken ground, covered 3½ fathoms, is 0.3 mile E of the light, and a rock, covered 2¾ fathoms, is 0.1 mile W of the light. Broken ground, covered 3½ fathoms, is 0.2 mile NE of the light. A strong ebb current, heavy swirls, and upwelling occur in the wake of this

broken ground, and dangerous tide rips prevail at such times with NE gales. A rock, marked by a buoy, is about 0.4 mile N of the light. A rock pile, marked by a daybeacon, 0.1 mile off Whale Island and 0.8 mile NW of the light, uncovers about 3 feet. A rock, covered 17 feet, is 0.3 mile off Whale Island and 0.9 mile NW of the light; heavy swirls and eddies occur in this area.

(117) **Shag Rocks**, 0.4 mile SW of Ilkognak Rock Light 1, uncovers about 2 to 3 feet.

(118) **Koniuji Island**, marked by a light, 0.3 mile from the S side of Whale Passage and 2 miles NW of Ilkognak Rock Light 1, is 40 feet high and grass covered. Kelp extends 0.2 mile W from the island. Koniuji Island should be given a good berth on the N side as the current sets toward it at times.

(119) **Kupreanof Strait**, 1.8 to 3 miles wide, is clear in midchannel but several shoal spots must be avoided.

(120) **Chernof Point**, on the S shore of Kupreanof Strait, 5.3 miles W of Ilkognak Rock Light 1, is low and wooded but prominent. A ledge of rock about 150 feet long and 50 feet wide, 0.5 mile W of the point and 0.2 mile offshore, uncovers about 5 feet; it is marked by heavy kelp. **Ostrovka Point**, 2 miles W of Chernof Point, is low and wooded; a high grassy islet is close-to.

(121) Broken ground, covered 4½ to 10 fathoms, extends 4.5 miles NW from Chernof Point up to 0.8 mile off Ostrovka Point and Dry Spruce Island.

(122) **Last Timber Point Light 6** (**57°58.7'N.**, **152°59.0'W.**), 35 feet above the water, is shown from a small house with a triangular red daymark on the point on the N side of Kupreanof Strait, 7.4 miles NW of Ilkognak Rock Light 1. **Thomas Rock**, 1.5 miles SE of Last Timber Point Light 6, is awash at low water; a patch, covered 6 fathoms, is 0.3 mile SW of the rock.

(123) **Gori Point**, 2.5 miles W of Last Timber Point Light 6, is the base of an abrupt sloping ridge with its summits close to the shore.

(124) **Kupreanof Mountain**, on Kupreanof Peninsula 10 miles W of Ilkognak Rock Light 1, is 2,440 feet high and consists of prominent broken gray rock.

(125) **Dry Spruce Island**, on the S side of Kupreanof Strait 8.5 miles W of Ilkognak Rock Light 1, is 225 feet high and wooded. **Dry Spruce Island Rock Light 7** (**57°57.9'N.**, **153°04.2'W.**), 30 feet above the water, is shown from a tower with a square green daymark off the NW end of the island on a ledge which uncovers about 6 feet. Two grassy islets and a pinnacle rock are off the N side of the W end of the island.

(126) A small wooded island and shoals, dry at low water, are between Dry Spruce Island and **Drying Point**, the end of the mainland on the N side of Dry Spruce Bay.

(127) **Bare Island**, just W of Dry Spruce Island, is partly wooded on its E half. **Dry Spruce Bay Entrance Light** (**57°57.3'N.**, **153°06.2'W.**), 76 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on a small grassy island 0.4 mile W of Bare Island.

(128) A rock, covered 2½ fathoms is marked by a buoy about 3.3 miles NW of the entrance to Dry Spruce Bay.

(129) **Anchorage.**—Temporary anchorage can be had in the bight on the N side of Whale Passage if stopped by too strong a flood current in the passage E. There is an eddy current in the bight, and care should be taken to get in far enough to ride to the eddy alone. A good place is in 8 fathoms, 300 yards from Whale Island, with Koniuji Island bearing about **238°**.

(130) A better anchorage can be had 0.3 to 0.4 mile off the W side of Whale Island, in 8 to 10 fathoms. This is convenient to ei-

ther Whale Passage or Afognak Strait, and is well out of the current; the anchorage is exposed to W winds.

(131) Anchorage may be had in places near the shore of Kupreanof Peninsula, but the only secure harbor is Dry Spruce Bay.

(132) **Tides and currents.**—Passage through Whale Passage at times of maximum current should be avoided. Floating aids to navigation may be dragged under or off station during these periods; mariners are urged to exercise particular caution. The tidal currents in Whale Passage set NW on the flood and SE on the ebb. During large tides, the currents are very strong with boils and swirls. The current velocity is about 4.5 knots. (See the Tidal Current Tables for predictions.) In summer 1981, slack water was observed to occur from 1 to 2 hours later than predicted.

(133) The tidal currents at Kupreanof Strait have an estimated velocity of 2 to 3 knots during large tides. At the W end of Kupreanof Strait near Onion Bay, high and low water occur about the same time as at Seldovia. The diurnal range is 14.4 feet. The tides meet in the strait a little W of Dry Spruce Island.

(134) **Routes.**—Enter Whale Passage on a 262° course from Kizhuyak Bay, passing S of the buoy off **Yuzhni Point** and 0.25 mile N of Ilkogmak Rock Light 1. When Ilkogmak Rock Light 1 bears 118° , 0.5 mile, and **Inner Point** bears 180° , change course to 298° . Gori Point open a little S of the S end of Koniuij Island heads S of the $2\frac{1}{2}$ -fathom rock. When **Uzkosti Point** bears 023° , 0.3 mile, change course to 317° until 0.3 mile N of Koniuij Island, then change to course 292° until 0.4 mile off Gori Point where a 286° course will lead into Shelikof Strait, passing 0.5 mile S of Malina Point Light 8. This route passes 0.5 mile N of a buoyed $2\frac{1}{2}$ -fathom shoal, 3.9 miles W of Gori Point.

(135) Some of the courses are at an angle with the axis of the current; natural ranges should be used to aid in maintaining the courses.

(136) **Dry Spruce Bay**, on the N side of Kodiak Island and on the S side of Kupreanof Strait, may be entered on either side of Bare Island.

(137) Approaching Dry Spruce Bay from E, give Dry Spruce Island a berth of 0.8 mile and steer for the W end of Bare Island on any bearing S of 226° until past Dry Spruce Island Rock Light 7; then haul E and pass midway between Dry Spruce and Bare Islands, course about 139° . This route is contracted to about 400 yards by a low water rock about 200 yards from shore inside the W end of Dry Spruce Island. Shoal water extends from the E end of Bare Island.

(138) In approaching Dry Spruce Bay W of Bare Island, care is necessary to avoid the foul ground extending over 0.2 mile from the S shore of Kupreanof Strait, 1.8 miles W of Bare Island.

(139) **Port Bailey** cannery and wharf are on the S shore of Dry Spruce Bay. The cannery is operated by Columbia-Wards Fisheries and manned from about mid-May through August. The cannery's VHF-FM radio has call sign, KJD-83; the single sideband (SSB) radio has call sign, KWC-56. The cannery uses 2450 kHz SSB and VHF-FM channel 79A as working frequencies. During the open season, the services of a nurse are available and water can be had at the wharf. The cannery has a machine shop and a store; emergency supplies of diesel fuel and gasoline are usually available. The 150-foot-long wharf has depths of 27 feet alongside. Unlighted mooring dolphins are along the shore SE of the cannery.

(140) Air service is available to and from Kodiak once a week during the off season and daily except Sunday during the open season.

(141) The best anchorage for large vessels is about 0.5 mile E of Bare Island and 0.4 mile off the cove in Dry Spruce Island, in 16 to 19 fathoms. A small vessel can anchor in the middle of the entrance to this cove in about 6 fathoms taking care to keep clear of the flat, that extends 250 yards from its NE side, and the unlighted mooring dolphins across the entrance to the cove. With strong SW winds, some williwaws are felt from Kupreanof Mountain. A midbay rock awash is 0.8 mile from the head of Dry Spruce Bay.

(142) **Pilotage, Port Bailey.**—Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See Pilotage, general, indexed as such, chapter 3, for details.)

(143) The Kodiak Island area is served by the Alaska Marine Pilots and Southwest Alaska Pilots Association.

(144) Vessels using Southwest Alaska Pilots Association pilots and en route to Port Bailey can meet the pilot boat about 1 mile N of Dry Spruce Bay Entrance Light ($57^{\circ}57.3'N$, $153^{\circ}06.2'W$).

(145) The pilot boat can be contacted by calling "PORT BAILEY PILOT BOAT" on VHF-FM channel 16 or on a prearranged frequency between pilot and agent/vessel.

(146) **Outlet Cape** is the W end of **Kupreanof Peninsula**, included between Kupreanof Strait and Viekada Bay. The cape has a steep slope to a peak 1,607 feet high, E of which is a low divide. **Laida Rocks** are a cluster of bare rocks 350 yards off the NW end of the cape.

(147) Viekada Bay is described later in this chapter.

(148) **Onion Bay** makes into Raspberry Island about 2 miles, and from its head a low divide extends through to Shelikof Strait. The entrance is narrow, and just inside, the bay is blocked by shoals partly bare at low water, between which are narrow channels suitable only for small craft. The tidal currents have an estimated velocity of 3 to 5 knots in the entrance. Temporary anchorage can be had 0.4 to 0.5 mile off the entrance in 10 to 15 fathoms.

(149) **Malina Point Light** ($58^{\circ}02.3'N$, $153^{\circ}22.0'W$), 80 feet above the water, is shown from a small house with a red and white diamond-shaped daymark at the S end of the mountainous headland on the SW part of Raspberry Island. The point itself is projecting and prominent. It has a grass-covered knoll at its end, with a low neck behind it, and then a steep slope to 1,570 feet.

(150) During NE weather, small craft can find excellent protection behind Malina Point.

(151) **Raspberry Cape**, at the W end of the mountainous headland on the SW part of Raspberry Island, is steep and high and has areas of bare rock. There are some bare rocks in the water close to the foot of the cape.

(152) **Local magnetic disturbance.**—Differences of as much as 3° from normal variation have been observed in Kupreanof Strait about 0.4 mile S of Raspberry Cape.

(153) **Kizhuyak Bay** is the continuation of Marmot Bay, and from Whale Island and Kizhuyak Point it extends S for about 14 miles into Kodiak Island. The outer bay is exposed to NE weather, and only at or near the head is protection afforded from seas sweeping in from Marmot Bay. A landlocked anchorage for small vessels is available in Anton Larsen Bay, but local knowledge is required to navigate its narrow entrance channel. Sharatin Bay, another arm, is exposed to seas from the NE.

(154) A midchannel course in Kizhuyak Bay is clear of known dangers; however, a bank of 6 to 9 fathoms, irregular in outline and rocky in places, extends across the bay, 2 to 3 miles S of Peregrebni Point. A somewhat similar bottom exists between opposite shores in the locality of the islet, 2.5 miles from the head. A small rock and a rock awash are 300 yards W of the islet.

(155) **Peregrebni Point**, on the W side of Kizhuyak Bay, is on a wooded peninsula that is backed by **Settler Cove**. The bottom of the cove, favoring the W shore, is sandy, and rises gradually from a depth of about 2 fathoms just inside the entrance to the mudflats at the head of the cove.

(156) **Port Lions** is the name given in 1965 to a settlement near the head of Settler Cove, created when all the inhabitants of Afognak moved in and declared it their new home. A good small-craft anchorage is 0.5 mile NE of the village. Two breakwaters forming a small-boat harbor are about 0.5 mile NE of Port Lions. A light is on the E end of the outer breakwater, and a daybeacon marks the E side of the harbor entrance. In July 1998, the controlling depth was 12 feet at midchannel in the approach and harbor entrance, thence depths of 10 to 13 feet were along the S and W piers with 14 feet along the center and N piers. The small-boat harbor has moorage for about 125 vessels. A graded landing field is here, providing Port Lions with mail service three times weekly from Kodiak. The Alaska State Ferry will make flag stops at Port Lions.

(157) **Port Wakefield** is at the head of Port Wakefield, a cove on the W side of Kizhuyak Bay about 0.7 mile SW of Peregrebni Point. A reported shoal, marked by a lighted buoy, is off the entrance to Port Wakefield. A causeway across the shallow head of Settler Cove connects Port Wakefield with Port Lions.

(158) **Pilotage, Port Wakefield**.—Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See Pilotage, general, indexed as such, chapter 3, for details.)

(159) The Kodiak Island area is served by the Alaska Marine Pilots and Southwest Alaska Pilots Association.

(160) Vessels using Southwest Alaska Pilots Association pilots and en route to Port Wakefield can meet the pilot boat about 1 mile NW of Kekur Point (57°51.5'N., 152°47.2'W.).

(161) The pilot boat can be contacted by calling "PORT WAKEFIELD PILOT BOAT" on VHF-FM channel 16 or on a prearranged frequency between pilot and agent/vessel.

(162) At Peregrebni Point the bay narrows to a width of 1.5 miles. The W shore from 1.2 to 4.5 miles S of Peregrebni Point is foul; a rock awash is 2.3 miles S of the point and 0.4 mile from the W shore.

(163) A flat extends 0.5 mile from the head of Kizhuyak Bay, where there is a large valley. Vessels may anchor off this flat in 19 fathoms, mud bottom; the depths are regular and there is ample room.

(164) **Kekur Point** marks the N end of the E shore of the narrow part of Kizhuyak Bay. A rocky patch of 6 fathoms and probably less depth, is 0.9 mile 032° from Kekur Point.

(165) Between Kekur Point and Kizhuyak Point, the W shore of the outer bay is indented by Sharatin Bay and Anton Larsen Bay. The waters along the intervening shore between the two bays, from **Three Pillar Point** to **Crag Point**, have several submerged rocks about 0.3 to 0.4 mile from that shore; and a patch of broken ground, with a depth of 9 fathoms, is 1 mile offshore in Kizhuyak Bay. Off Anton Larsen Bay is a kelp patch with a depth of only 3 feet, 0.9 mile 006° from Crag Point.

(166) **Sharatin Bay**, E of Kekur Point, has a small grass-covered islet near the center of the bay. A rock, covered 3 feet, is 400 yards N of the islet. A rock, that uncovers 9 feet, is 300 yards off the projecting point of the bay shore W of the islet. A rock, covered 6 feet, is about 0.5 mile NNW of Three Pillar Point. A tide flat extends 0.8 mile from the head of the bay.

(167) **Anton Larsen Bay**, between the point 0.9 mile S of Kizhuyak Point and Crag Point, has its entrance nearly blocked by islands; and only small craft can enter. A rock, covered 3 feet and marked by kelp, is about 0.5 mile N of the outer entrance island N of Crag Point. A reef, bare at minus tides, lies 260 yards 045° from Crag Point. The passage into the bay E of Crag Point and the two passages at the N entrance are very narrow.

(168) The northernmost passage into Anton Larsen Bay was used by a survey tender, 77 feet long and drawing 6½ feet. The entrance to this passage is between the northernmost island in the bay entrance and the N point of the bay. About 0.3 mile inside this entrance and about 130 yards from the mainland is a large rocky patch, part of which uncovers. The channel is S of this rocky patch. At the narrowest part of this passage is a small, narrow islet which hugs and parallels the mainland. The survey indicates that the channel borders close along the outer side of the narrow islet and makes a slight turn around the W end of the islet. Opposite the W end of the islet, the SW side of the channel is bordered by rocks. Extreme caution and local knowledge are necessary.

(169) Anton Larsen Bay has a 3-mile stretch of water about 0.5 mile wide, extending in a S direction from the N entrance passage. A rock, awash at high tide, is in the middle of this stretch, about 1 mile from the entrance passage. The channel is between the rock and the shore W of it. A vessel may anchor about 0.3 mile S of the rock in about 15 fathoms.

(170) A road runs from the W side of Anton Larsen Bay to Kodiak. It is closed during the winter.

(171) **Kizhuyak Point** marks the outer end of the E side of Kizhuyak Bay. A 2¼-fathom depth in a kelp patch is about 0.8 mile 210° from Kizhuyak Point.

(172) The broad point 0.8 mile NE of Kizhuyak Point is partly wooded and terminates in white cliffs in places. A rock, which uncovers about 4 feet, is 400 yards N from this point. Shoal water extends 300 yards N of the rock.

(173) Between the broad point and Shakmanof Point is **Shakmanof Cove**. A rock, covered 3 feet, is near the center of this cove.

(174) **Shakmanof Point**, on the S side of Marmot Bay about 2 miles W of the entrance to Narrow Strait, is prominent and heavily wooded. Some rocks awash are close to the point, and it should be given a berth of over 300 yards.

(175) **Shakmanof Point Light** (57°55.5'N., 152°35.3'W.), 60 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark.

(176) **Low Island Anchorage**, the cove between Shakmanof Point and Low Island, affords anchorage in suitable depths but it is exposed to N weather. N winds in this locality are infrequent.

(177) **Three Brothers**, 1.2 miles E of Shakmanof Point, is a kelp-marked reef 600 yards long and steep-to on its W side. Parts of the reef uncover about 2 feet. Near its SW end are two rocks which uncover about 4 feet, and at its NE end is a rock which uncovers about 3 feet. A light is on the southwesternmost rock. Kelp extends about 250 yards S of the light toward Low Island.

(178) **Low Island**, in the middle of the bight on the S shore of Marmot Bay between Shakmanof Point and the W entrance to Narrow Strait, is grass covered, and about 40 feet high at its S end. Most of the island is wooded.

(179) Vessels cross the 7-fathom bank or bar about 0.3 mile NNE of Low Island, bound to or from Narrow Strait. A range consisting of Prokoda Island Light just open on the nearly vertical bluffs of Ouzinkie Point leads between a red buoy marking a submerged rock on the N side of the crossing and a green buoy marking a 3½-fathom shoal on the S side of the crossing. A wire drag examination along the range reveals a clear depth of 30 feet. It is required, however, that no deviation from the range be made. The submerged rock is 800 yards from Low Island and has less than 14 feet over it. The 3½-fathom shoal is at the end of a reef extending N from Low Island. These dangers are marked by kelp.

(180) The passage S of Low Island is blocked by shoals that bare at low tide.

(181) Narrow Strait and Ouzinkie Narrows are described later in this chapter.

(182) **Spruce Island**, on the S side of Marmot Bay, is about 6 miles long in an E and W direction. The island is rugged, with **Mount Herman**, 1,595 feet high 2 miles W of East Cape. The lower elevations are in general heavily wooded, with a low wooded area 0.8 to 1 mile wide extending between the E shore of the island and the base of Mount Herman. Grass is quite pronounced on the higher slopes of Spruce Island. The higher summits are barren. The waters adjacent to the N and E shores of the island have not been completely surveyed.

(183) About 1 mile off the W shore of Spruce Island and approximately on a line between Three Brothers and Wooded Island are two dangers: a kelp-marked shoal with a depth of 2 fathoms is about 1 mile from Three Brothers, and a rocky islet, 24 feet high, is 0.9 mile from Wooded Island.

(184) Reefs extend 600 yards off the W shore of Spruce Island, 0.8 mile N of Ouzinkie Point, described later in this chapter.

(185) **Wooded Island**, 174 feet high, is 300 yards off **Zapadni Point**, the promontory on the W side of Spruce Island. It is heavily wooded. A fair anchorage protected from E winds can be had just to the S of the island. A 3-fathom shoal is 700 yards 098° from the SW end of Wooded Island.

(186) **The Triplets**, 2 miles W of North Cape, are a chain of three high, grassy islets extending 1 mile in a general N and S direction. The northernmost islet, 275-foot **Taliudek Island**, is the highest of the group.

(187) **North Cape**, the N headland of Spruce Island, is a wooded knob 551 feet high. Rocky islets and rocks awash at various stages of the tide fringe the N side of the cape within 400 yards of the shore. A shoal of 2¼ fathoms is 0.4 mile off the E point of the cape.

(188) **Island Bay**, just S of North Cape and opening to the E, has not been surveyed. It affords fair anchorage for medium-size craft from W wind. If small craft use the head of the bay, care should be taken to pass N of a rock awash at low water about 0.3 mile from the head.

(189) **Knee Bay** is the outer portion of the indentation in the N shore of Spruce Island about 2 miles S of North Cape. **Balika Cove**, narrow and about 1 mile long, is the continuation of Knee Bay. The bay and cove have not been surveyed. The first enclosure of Balika Cove affords excellent shelter for small craft, but can be entered only at high tide because of a ledge at the entrance to the cove.

(190) The N shore of Spruce Island between Knee Bay and East Cape is bordered by rocky islets and rocks awash at various stages of the tide. Some of these are over 0.3 mile offshore.

(191) **East Cape**, the NE end of Spruce Island, is a wooded flat extending about 0.8 mile inland to the base of Mount Herman. A group of bare rocks is within 300 yards E of the cape. Banks with depths partly under 10 fathoms extend nearly 2 miles NE of the cape.

(192) A rock awash at low water is about 0.5 mile S of the point of East Cape and 400 yards from the E shore of Spruce Island.

(193) Two wooded islands, forming **Ostrof Point**, about 1 mile S of East Cape, are surrounded and connected to the E shore of Spruce Island by a reef. The outer part of this reef terminates in a rock, which uncovers about 2 feet, 300 yards E of the outer island. Rocks awash at low tide are 0.3 mile NE of the outer island. A rock, which uncovers about 4 feet, is 250 yards S of the outer island.

(194) **Icon Bay** is the small indentation in the E shore of Spruce Island halfway between East Cape and South Point. This bay, as well as the adjoining small bays to the S, has not been surveyed. It is reported that a medium-sized craft may find temporary anchorage in W weather. A rock awash baring near low water, is 300 yards from the head and 150 yards from the N shore of Icon Bay.

(195) **Narrow Strait**, between Spruce and Kodiak Islands, is used by vessels bound from Kodiak to Shelikof Strait. It has a clear width of 1 mile at its E end, while at its W end the channel is 100 to 300 yards wide with a least depth of about 7 fathoms. With E gales a heavy swell sets into the strait, but this generally loses much of its force toward the W end.

(196) Ouzinkie Narrows, the narrow passage of Narrow Strait in the vicinity of Otmeloi Point and Prokoda Island, is described later in this chapter.

(197) The W approach to Narrow Strait is S of Three Brothers and across the buoyed 7-fathom bank 0.3 mile NNE of Low Island.

(198) The best anchorage in Narrow Strait is in the middle of Ouzinkie Harbor between Prokoda Island and Ouzinkie, in 18 to 20 fathoms, somewhat exposed to an E swell. A small vessel and small craft can anchor at the head of Ouzinkie Harbor near Ouzinkie, slightly favoring the W side, in 5 to 10 fathoms.

(199) **South Point**, the E end of Spruce Island, is marked by a high black rocky islet about 600 yards off the point. This rocky islet is 65 feet high; several lower ones are just to the S and W thereof.

(200) Two islands are on the N side of Narrow Strait. **Eider Island**, the E one, is very uneven and grassy on top. A small low rocky islet is 400 yards E of the E island, and a rock awash at low water is 200 yards S of the E island. **Nelson Island**, the W one of the two islands, is higher and wooded. A group of rocks, which uncover 5 feet, is 350 yards S of Nelson Island and similar rocks are 0.3 to 0.4 mile W of the island.

(201) The passages leading to the cove back of Nelson Island are mainly foul or composed of broken bottom. They should be avoided by vessels of any size, except perhaps by small craft with local knowledge.

(202) **Sunny Cove**, the bight on the N shore of Narrow Strait, 2.3 miles NW of South Point, affords anchorage for small craft in 3 to 4 fathoms, sand bottom. A ledge covered 1½ fathoms is 0.3 mile S from the W point of the entrance to Sunny Cove. Two bare rocks are off the middle of the entrance. A rock awash is 90 yards

NW from the E point of the entrance. In entering, the W shore of Sunny Cove should be favored.

(203) A rocky patch, covered $2\frac{3}{4}$ fathoms and marked by kelp, is 0.3 mile from the N shore of Narrow Strait just SE of **Black Point**.

(204) **Prokoda Island**, in the middle near the W end of the strait, is 114 feet high and partly wooded. An islet is 100 yards off its NE end, and kelp extends 100 yards off the islet and the SE side of the island.

(205) **Prokoda Island Light 2** ($57^{\circ}54.6'N$, $152^{\circ}30.4'W$), 40 feet above the water, is shown from a small house with a red triangular daymark on the SW point of the island. The light is a guide for navigating the passage S of the island.

(206) The channel N and W of Prokoda Island is 300 yards wide and clear, but the turns are sharp and difficult to make when the current is running.

(207) **Ouzinkie** is a small native village at the head of the cove in Spruce Island N of Prokoda Island. The most conspicuous features in the town are the warehouse close to the near shore of the cove, the Russian Orthodox Church spire, and the boardwalk which runs around the N side of the cove. Fishing is the principal industry in Ouzinkie.

(208) An L-shaped pier, connected to land at both ends, is on the W side of the cove and can handle vessels up to 120 feet long and drawing about 15 feet. A grid of sawed-off pilings is along the E side of this pier; the grid is considered hazardous because of the steel spikes protruding upward from the piles. A foul area is about 100 feet SW of this pier. A cannery and pier were built over the water on the E side of the cove. The pier can accommodate vessels 80 feet long and drawing 12 feet. A rock, covered 6 feet, is 400 feet SSE of the S corner of the pier; the rock is usually marked with a fishing float. Fuel is available on the W pier. There is scheduled air service between Ouzinkie and points on Kodiak Island. Radiotelephone and radiotelegraph communications are maintained.

(209) In entering Ouzinkie from the E, care should be taken to avoid the reef that extends some distance off the SE shore of Prokoda Island. A small general store is in the warehouse at Ouzinkie.

(210) **Ouzinkie Point**, SW end of Spruce Island, is the point on the N side of the W entrance to Narrow Strait. At the point are cliffs above which a wooded slope rises steeply to a knoll about 110 feet high. The knoll is connected with the land back of it by a low, narrow, grass-covered neck.

(211) Kelp is close to Ouzinkie Point and the point should be given a berth of about 125 yards.

(212) **Entrance Point**, on the S side at the W entrance of Narrow Strait, is grassy with some scattered trees, and a rock 12 feet high is 100 yards off its E side. A kelp-marked shoal, with 7 to 12 feet over it, extends 250 yards N from Entrance Point. A rocky ledge, covered 7 feet and marked at the outer end by a buoy, extends about 325 yards NNE of the point.

(213) **Neva Cove**, between Entrance Point and Otmeloi Point, provides good anchorage for medium-size craft from all winds except NW, in 13 fathoms, soft bottom.

(214) Mariners using **Ouzinkie Narrows**, the narrow passage of Narrow Strait in the vicinity of **Otmeloi Point** and Prokoda Island, should be careful because the currents will set a vessel into danger rapidly. Depths of 5 fathoms or less extend 200 yards SE of Prokoda Island, and depths of 4 fathoms or less extend 200 yards N from the small mainland point 0.5 mile E from Otmeloi

Point. Between these areas are depths of over 10 fathoms for a width of 150 yards. The best route through Ouzinkie Narrows from the E is midway between the SE point of Prokoda Island and the small mainland point to the SE, thence proceed at midchannel until abreast of Prokoda Island Light 2. From abreast the light to abreast of Ouzinkie Point, the route is practically a straight course that passes between Otmeloi Point and a rock which uncovers about 6 feet. The rock, marked by a daybeacon, is about 275 yards N of Otmeloi Point. The channel between the rock and a shelving spit with kelp that extends 125 yards from Otmeloi Point has a depth of 7 fathoms, and is about 100 yards wide. Vessels usually pass about 80 yards S of the daybeacon to avoid the shelving spit. Mariners should favor the N half of the passage between Entrance Point and Ouzinkie Point, so to pass clear of a 2-fathom ledge which extends 350 yards N of Entrance Point. The ledge is marked by a buoy.

(215) **Course Point**, on the S shore of Narrow Strait, about 2 miles E of Otmeloi Point, is prominent and is marked by a small rocky, grass-covered islet, 150 yards from shore.

(216) A pinnacle rock, 70 feet high, is near the S shore of Narrow Strait about 0.9 mile SSE of Course Point. The cove SE of the pinnacle is foul except for a small area in the center. A $4\frac{1}{4}$ -fathom shoal is 400 yards from the S shore near **Azimuth Point**.

(217) **Termination Point** is the E limit of the S shore of Narrow Strait. Foul ground extends nearly 0.5 mile N of the point.

(218) **Monashka Bay**, just E of Termination Point, is clear inside except within 0.3 mile of the shore. Anchorage may be found near the SE part of the head of the bay, but there is full exposure to NE weather.

(219) **Miller Point**, on the E side of Monashka Bay entrance, is partly wooded and terminates in a rocky bluff. High, bare rocks extend more than 200 yards off the point, and rocks baring at various stages of the tide are outside of them. The outermost rock uncovers 9 feet and is 0.6 mile 040° from Miller Point. The range, consisting of the NE end of Long Island open N of the outer Hanin Rocks, clears the rocks off Miller Point.

(220) Tidal currents in Narrow Strait are weak except in the W entrance where the velocity is about 1.5 knots. The times of the slacks and strengths may be obtained from the Tidal Current Tables.

(221) **Charts 16594, 16593, 16595.—Chiniak Bay**, a 13-mile-wide indentation in the NE coast of Kodiak Island between Spruce Cape and Cape Chiniak, is the approach to the important commercial port of Kodiak on the N side and a Coast Guard base in Womens Bay on the W side.

(222) **Spruce Cape**, the NW point of Chiniak Bay and marked by a light, is a low bluff, grass covered on top and backed by woods. Bare rocks and foul ground extend 0.6 mile N from the cape to **Hanin Rocks** which are two rocks about 30 feet high with an extensive surrounding ledge. **Hanin Rock Light** ($57^{\circ}50'06''N$, $152^{\circ}18'54''W$), 43 feet above the water, is shown from a skeleton tower on the SW rock. A reef, mostly bare at low water, extends 250 yards N of Hanin Rocks.

(223) **Williams Reef**, 5 miles E from Spruce Cape, is the outermost danger in the NE approach to Chiniak Bay. The reef consists of two rocks, 100 yards apart, that uncover at lowest tides; deep water is close-to and breakers generally occur, except near high water with a smooth sea. A lighted whistle buoy is NE of Williams Reef.

(224) A small patch, covered $3\frac{1}{4}$ fathoms, is 1.7 miles 285° from Williams Reef.

(225) **Hutchinson Reef**, 0.8 mile NE of Spruce Cape, is 0.4 mile in extent with a least depth of $1\frac{3}{4}$ fathoms. A large kelp patch is between the reef and Hanin Rocks. A lighted whistle buoy, 0.4 mile NE of Hutchinson Reef, marks the W side of the N approach to Kodiak.

(226) Broken ground, 0.9 mile E of Spruce Cape, is covered $4\frac{1}{4}$ fathoms and marked by a lighted whistle buoy.

(227) On the W side of the channel, 0.4 to 1 mile S of Spruce Cape, are two bare reefs; the outer edges are about 600 yards from shore. The E edge of the S reef is marked by a lighted buoy. **Channel Rock**, on the S reef, is black, 7 feet high, amid extensive ledges. Kelp surrounds the reefs and extends SSW of Channel Rock, gradually trending toward the shore and joining the shore kelp. Deep water extends close to the edge of the kelp at 150 yards off Channel Rock.

(228) A rock, covered $1\frac{1}{2}$ fathoms, is 0.9 mile SE from Spruce Cape; it is marked by a lighted whistle buoy.

(229) **Woody Island**, 2 miles S of Spruce Cape, is about 200 feet high and heavily wooded except for a high grass-covered bench at the S end and a small area back of **Icehouse Point**. Some buildings are conspicuous from W of the point. Just N of Icehouse Point is a 200-foot finger pier with two floats; depths alongside range from 6 to 9 feet. Ruins of an old concrete pier are 75 yards NE of the present pier; caution is necessary. An aero radiobeacon is on the SE side of the island.

(230) Anchorage is prohibited in the area between Woody Island and the Kodiak shore as shown on chart 16595.

(231) Foul ground extends 1.3 miles N from the NE side of Woody Island. A shoal, covered $3\frac{3}{4}$ fathoms, is 1.5 miles 092° from Woody Island Light.

(232) There are three large white buildings back of **Shahafka Cove** on the N shore across the channel from Woody Island.

(233) **Woody Island Light** ($57^\circ 47.8'N$, $152^\circ 20.3'W$), 50 feet above the water, is shown from a square frame with a red and white diamond-shaped daymark at the top of the bluff on the W side of the N point of the island. The light marks the E side of the passage between Woody Island and the mainland. The outer limits of foul ground and kelp surrounding the N part of Woody Island are 0.4 mile W and 0.6 mile NNE from the light.

(234) A kelp patch of a 4-fathom shoal, marked by a buoy, is 0.35 mile 255° from Woody Island Light. Another kelp patch of a 4-fathom shoal, marked by a lighted bell buoy, is 0.7 mile 265° from the light. The recommended channel is between these shoals.

(235) The group of islands W of Woody Island is surrounded by foul ground. **Bird Islet**, the easternmost of the group, is 68 feet high, small, and grass topped; foul ground and kelp extends 550 yards N and 350 yards S of the islet. A $2\frac{1}{4}$ -fathom spot is about 550 yards SSW from the southernmost extremity of Bird Islet. **Holiday Island**, W of Bird Islet, is 131 feet high and wooded on its N half. **Near Island**, the largest of the group, is 202 feet high and grass covered.

(236) The area between the N side of Near Island and the Kodiak shore is shoal and mostly foul, except for the 200-foot-wide dredged channel at the E approach to Kodiak. **Cyane Rock**, 350 yards NE of Near Island, is awash at lowest tides; a lighted bell buoy marks the rock. The NE entrance to the dredged channel is between the buoy marking Cyane Rock and the foul ground which extends nearly 200 yards from the bight NW of the rock.

(237) **Long Island**, the easternmost island in the N end of Chiniak Bay, is 3.5 miles long, 251 feet high, hilly, with cliffs at the water, and wooded except toward its N end. The NE end of the island is formed by two grass-covered knolls, the E one is joined to the other by a narrow neck almost covered at high tide. The NW corner of the island is a prominent vertical bluff more than 100 feet high, rising to a grass-covered knoll 178 feet high. Two prominent pinnacles, 50 feet high, with lower bare rocks nearby, are off the N extremity of the island.

(238) **Kodiak Rock**, covered $\frac{3}{4}$ fathom, is about halfway between Long Island and Williams Reef. Extensive reefs, partly marked by kelp and having some high bare heads, extend 0.6 to 0.9 mile N from the N shore of Long Island. Shoal spots are between the end of these reefs and Kodiak Rock. Shoal rocky spots, covered $3\frac{3}{4}$ to 8 fathoms, extend 1.8 miles E of Kodiak Rock; a rock, covered $2\frac{1}{2}$ fathoms, is 1.6 miles W of Kodiak Rock.

(239) The SE side of Long Island is fringed with rocks and kelp; detached dangers are 0.3 to 0.5 mile from the shore. **Refuge Island**, a small, steep, grass-covered rocky islet, 80 feet high, connected with Long Island by a reef, is off the S extremity of Long Island.

(240) An extensive covered ridge with extremely broken bottom extends NNE for 10 miles from the S side of Chiniak Bay. A distinctive submarine valley borders the W side of the ridge; its seaward outlet leads around the N end of the ridge, while the S part leads into Kalsin Bay. The valley forms a deep basin S of Long Island.

(241) The outermost danger on the ridge is a rock, covered $4\frac{1}{4}$ fathoms, 4.2 miles E from Refuge Island, which breaks in a heavy swell.

(242) **Humpback Rock**, 2.8 miles SE from Refuge Island, is low and of small extent. Vessels should pass not less than 1 mile N of the rock to avoid the broken ground; a lighted whistle buoy is 0.6 mile NE of the rock.

(243) Numerous reefs comprise the ridge from Humpback Rock to the S shore. **Kalsin Reef**, 1.8 miles SW from Humpback Rock, is awash at high water.

(244) A well-enclosed bay, making in from the W side of Long Island, is accessible to small vessels and affords good shelter and holding ground of mud. An island, just inside the middle of the opening, is connected with the E bay shore by a bar. A black rock, about 6 feet high, is between the island and the S point of the opening. To enter the S part of the bay, steer 179° and pass between the black rock and the S point, slightly favoring the rock and then the W bay shore at the point. Anchor in the center of the basin. Access to the N part of the bay requires local knowledge.

(245) **Vasilief Rock**, covered $\frac{1}{2}$ fathom and marked by kelp, is about halfway between the S point of Woody Island and Refuge Island.

(246) **Inner Humpback Rock**, 0.5 mile 170° from the S point of Woody Island, is an 11-foot-high pinnacle; the intervening area is foul. Foul ground extends 600 yards SW of Inner Humpback Rock.

(247) A detached rocky patch, covered 3 fathoms and marked off its SW side by a lighted buoy, is 0.6 mile W from the S end of Woody Island.

(248) A rock that uncovers is 0.4 mile SW of Icehouse Point. A shoal, covered $3\frac{1}{2}$ fathoms, is 600 yards 348° from the point. A rock that uncovers is between the $3\frac{1}{2}$ -fathom shoal and Bird Islet. The channel W of Woody Island is marked by buoys.

(249) **St. Paul Harbor**, the W part of Chiniak Bay between **Crooked Island** on the N and Cliff Point on the S, is fronted with many reefs and islets, but affords a S passage to Kodiak.

(250) **St. Paul Harbor Entrance Light** (57°44.3'N., 152°25.8'W.), 38 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark, 0.9 mile NNE of Cliff Point. A buoyed channel through the reefs is 500 yards N of the light. A lighted whistle buoy marks the approach to the channel.

(251) A 3½-fathom spot and a 4½-fathom spot are about 600 yards W, and 900 yards SSW, respectively, from the light.

(252) **Puffin Island**, near the center of St. Paul Harbor, is 80 feet high, small, and grass covered. The end of the foul ground, extending 600 yards SW from the island, is marked by a lighted bell buoy. A 4½-fathom spot, marked on its SE side by a lighted buoy, is about 0.38 mile W of Puffin Island.

(253) A 4-fathom spot and an obstruction, covered 6 fathoms, are 175 and 475 yards NW, respectively, from the NW extremity of Puffin Island.

(254) The W part of St. Paul Harbor is bordered by dangerous reefs and shoals up to 0.6 mile offshore.

(255) **Gull Island**, 0.5 mile W of Near Island, is 24 feet high and narrow. A shoal extending 350 yards SW from the S point of the island is marked at the W extremity by a lighted buoy. The foul ground N of the island is marked by a lighted buoy about 260 yards off the N point. More foul ground, marked by a buoy at the outer extremity, extends about 300 yards SE of the island.

(256) **Kodiak** is the fifth largest and one of the oldest towns in Alaska; the domes of the old Russian church are conspicuous. Most of the people are employed in the fishing industry.

(257) **Weather, Kodiak Vicinity**.—Kodiak has primarily a marine climate that is exemplified by the limited daily and annual temperature ranges. For instance, the mean annual temperature range is about 30°F (-1.1°C). The normal monthly temperature is less than 32°F (0°C) for December through February, and 50°F (10°C) or higher, July through September. During the summer, the mean air temperature closely approximates the mean sea surface temperature, rising slightly above it during August but falling below again in September. In winter, the mean maximum air temperature more closely resembles the mean sea surface temperature curve. Because of the proximity of a large landmass to Kodiak, the absolute temperature range is 102°F (about 39°C) regardless of the marine influence. In summer, maximum temperatures will vary 10°F to 20°F (-12.2°C to -6.7°C), depending on whether the northwest gradient is strong enough to maintain a flow of air from over the island, or whether it is weak enough that the sea breeze predominates. The highest daily maximum temperatures occur with northwest winds in the summer.

(258) Precipitation is normally abundant throughout the year. Maximums normally occur in September and October with April and July the driest months. All months, however, have a wide variation in the amount of precipitation. The normal annual precipitation is over 65 inches (1651 mm) but ranges from about 38 to 95 inches (965 to 2413 mm). A very high percentage of the precipitation falls during northeast to southeast winds. Small amounts of snow may fall as late as May or as early as September with good ground cover anticipated in November. The mean annual snowfall is about 75 inches (1905 mm) with extremes of 178.1 inches (4523.7 mm) in 1956 and 15.9 inches (403.9 mm) in 1945. Precipitation measurement is often difficult due to strong, gusty surface winds which frequently accompany precipitation.

Drifting and blowing snow occasionally close the airfield for periods of up to twenty-four hours.

(259) Although the prevailing winds direction is northwest every month except June, and the average speed is about nine knots these data may be misleading because of the extreme variability in both direction and speed. The maximum gust recorded at the station was 99 knots in January 1950. However, Coast Guard cutters docked in Womens Bay, have reported williwaw winds off Old Womens Mountain in excess of 120 knots, in January 1973. Gusts of over 50 knots have occurred during each month of the year, but are most likely to occur in the winter months. An average of eight storms each year brings winds in excess of 55 knots with the average duration of gusts in excess of 55 knots about eight hours per storm.

(260) **Prominent features**.—The N part of Kodiak Island W of Chiniak Bay is mountainous; there are several prominent peaks near the shore. Spruce Cape, Cape Chiniak, and the islands overspreading the N part of the bay are comparatively low.

(261) **Devils Prongs**, 2 miles NW of Kodiak, are three prominent peaks that appear nearly equal in height approaching from SE; the middle one is flat on top and the N prong is 2,075 feet high and sharp.

(262) **Pillar Mountain**, a short 1,274-foot ridge, rises steeply from the shore back of Kodiak.

(263) **Barometer Mountain**, 5 miles SW of Kodiak and 2 miles inland from the W shore of Chiniak Bay, is 2,488 feet high and a useful guide in clear weather for the N approach. A notch shows the W side of its summit from N. An aerolight, 1.5 miles E of Barometer Mountain, is 178 feet above the water and useful in the approach to Chiniak Bay when it is not obscured by the islands to the NE and the mainland to the S.

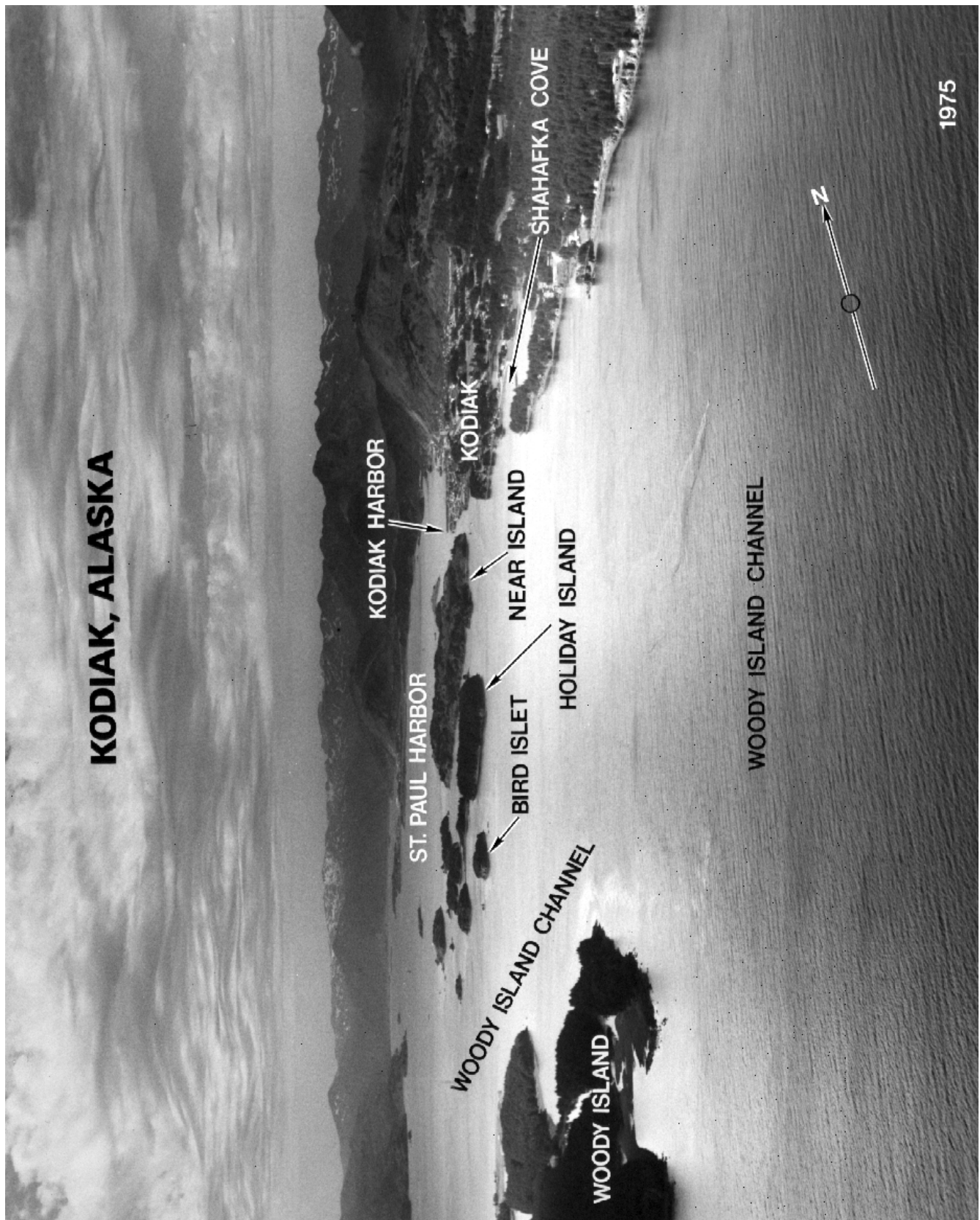
(264) The gantry crane at the Container Terminal, 1 mile WSW of Kodiak, and the landslide just NE of the terminal are prominent when approaching Kodiak from the S.

(265) **Channels**.—There are three marked approaches to the wharves in **Kodiak Harbor**. From N, the channel is N of Woody Island and Near Island. In June 2000, the controlling depth was 22 feet (3.7 fathoms) in the 200-foot-wide dredged channel N of Near Island. From S, the channel is S of Long Island, W of Woody Island, and N of Near Island; controlling depth, about 22 feet (3.7 fathoms); or S of Long Island, SW of Puffin Island, and thence in St. Paul Harbor W of Gull Island; the controlling depth is 29 feet (4.8 fathoms).

(266) **Anchorage**.—**Inner Anchorage**, locally known as Winter Anchorage, is 0.4 mile W of Kodiak, 250 to 300 yards off the Kodiak Island shore. In May 1985, the City of Kodiak declared that vessels do not anchor within this area due to possible fouling and damage to the waste water discharge lines of the canneries in the vicinity. (Kodiak City Ordinance No. 653, § 18.28.190(g) applies.) The mooring buoy in the anchorage, still in use, has capacity for mooring large vessels. Other vessels may anchor just outside the Inner Anchorage, location depending on weather conditions and vessel size; however, never anchor in or near the cable area crossing the narrow passage between Near Island and Kodiak. Anchoring information is available from the **harbormaster** who monitors 4125 kHz and VHF-FM channels 12, 14, and 16.

(267) A fixed highway bridge with a clearance of 101 feet crosses Kodiak Harbor, connecting Kodiak and Near Island.

(268) **Dangers**.—Chiniak Bay and approaches are full of dangers that must be avoided.



(269) **The March 1964 earthquake caused a bottom subsidence of 5.8 feet at Kodiak. Until a complete survey is made of the area, caution is necessary because depths may vary from those charted and mentioned in the Coast Pilot.**

(270) **Routes.**—From Northward: In coming from Narrow Strait, pass 1 mile N of Hanin Rock Light, thence E of Hutchinson Reef Lighted Whistle Buoy 4, and then follow the buoyed channel N of Woody and Near Islands to Kodiak Harbor. From Marmot Strait, a 206° course will enter Chiniak Bay E of Hutchinson Reef Lighted Whistle Buoy 4, then follow the buoyed channel to Kodiak Harbor. The routes from N pass over or near a 5½-fathom spot NE of Spruce Cape which has not been examined with the wire drag.

(271) From Northeastward: Keep N of the line to Spruce Island summit bearing 294° until the cliffs near the SW end of Long Island are well open W of the sheer cliff at its NW corner. Then steer 241° for about 4 miles with Barometer Mountain ahead and Spruce Cape slightly to the right. This course passes E of Hutchinson Reef Lighted Whistle Buoy 4, thence through the buoyed channel to Kodiak Harbor.

(272) The N approach to Kodiak Harbor is not difficult in clear weather, but is dangerous at night or in thick weather. Exercise care to avoid Williams Reef and the other dangers in the entrance. Depths are irregular in the approach so that surroundings cannot be relied upon as a guide to the entrance or to avoid danger.

(273) The narrow passage N of Near Island leading to Kodiak Harbor requires careful piloting; strangers should not attempt it without thorough knowledge of the dangers, and tide and current conditions.

(274) From Eastward and Southward: Enter Chiniak Bay N of Humpback Rock Lighted Whistle Buoy 1, then follow the buoyed channel through the reefs N of St. Paul Harbor Entrance Light and St. Paul Harbor to Kodiak Harbor. If it is desired to approach Kodiak Harbor through the narrows N of Near Island, use the buoyed channel W of Woody Island after entering Chiniak Bay N of Humpback Rock. Exercise caution to avoid Inner Humpback Rock and the dangers SW of it.

(275) In approaching Chiniak Bay, the bank with a least depth of 4¼ fathoms, 3.5 miles SE of Long Island, and the reefs extending from Humpback Rock SW to the mainland should be avoided.

(276) **Tides and currents.**—The diurnal range of tide at Kodiak is 8.5 feet. Daily predictions for Kodiak are given in the Tide Tables.

(277) In Chiniak Bay, the flood current sets NE and the ebb current SW with considerable velocity in places around the islands. In the N entrance, the tidal currents have a velocity of 2 to 3 knots during the strength of the larger tides. They turn sharply around Spruce Cape and across the reefs N of it.

(278) In the narrows off Kodiak, the current velocity is about 0.9 knot. The flood sets NE. (See the Tidal Current Tables for predictions.)

(279) **Pilotage, Kodiak Harbor.**—Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See Pilotage, general, indexed as such, chapter 3, for details.)

(280) The Kodiak Island area is served by the Alaska Marine Pilots and Southwest Alaska Pilots Association.

(281) Vessels using Southwest Alaska Pilots Association pilots and en route to Kodiak or Women's Bay can meet the pilot boat

about 2 miles 100° from St. Paul Harbor Entrance Light (57°44.3'N., 152°25.8'W.).

(282) The pilot boat can be contacted by calling "KODIAK PILOT BOAT" or "KODIAK KING" on VHF-FM channel 16 or on a prearranged frequency between pilot and agent/vessel.

(283) **Quarantine, customs, immigration, and agriculture quarantine.**—(See chapter 3, Vessel Arrival Inspection, and appendix for addresses.)

(284) **Quarantine** is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(285) **Customs.**—Kodiak is a customs station.

(286) **Kodiak Coast Guard Support Center** is in Womens Bay, 5 miles SW of Kodiak. It is described later in this chapter. **Kodiak Coast Guard Air Station** is at the Support Center.

(287) **Wharves.**—The waterfront facilities at Kodiak consist of three deep-draft municipal wharves, administered by a Port Director; a small-boat harbor, administered by a **harbormaster**; and many private wharves used mostly by the fishing industry.

(288) Kodiak City Pier 3, Container Terminal (57°46'55"N., 152°26'00"W.): a wharf 1 mile SW of Kodiak; 360-foot face, 660 feet of berthing space with dolphins; 38 feet alongside; deck height, 19 feet; one 27½-ton gantry crane; receipt and shipment of containerized general cargo; storage space for 180 containers; owned by the City of Kodiak and operated by Sealand Service, Inc.

(289) There is a heavy surge at the Container Terminal during and after SW through SE gales.

(290) Kodiak City Pier 2, Cargo Terminal: a wharf 0.4 mile NE of the Container Terminal; 925-foot face; 38 feet alongside; deck height, 19 feet; receipt of conventional and containerized general cargo; storage for 170 containers; owned by the City of Kodiak and operated by Alaska Terminal & Stevedoring Co., Inc.; the Port Director's office is on this wharf.

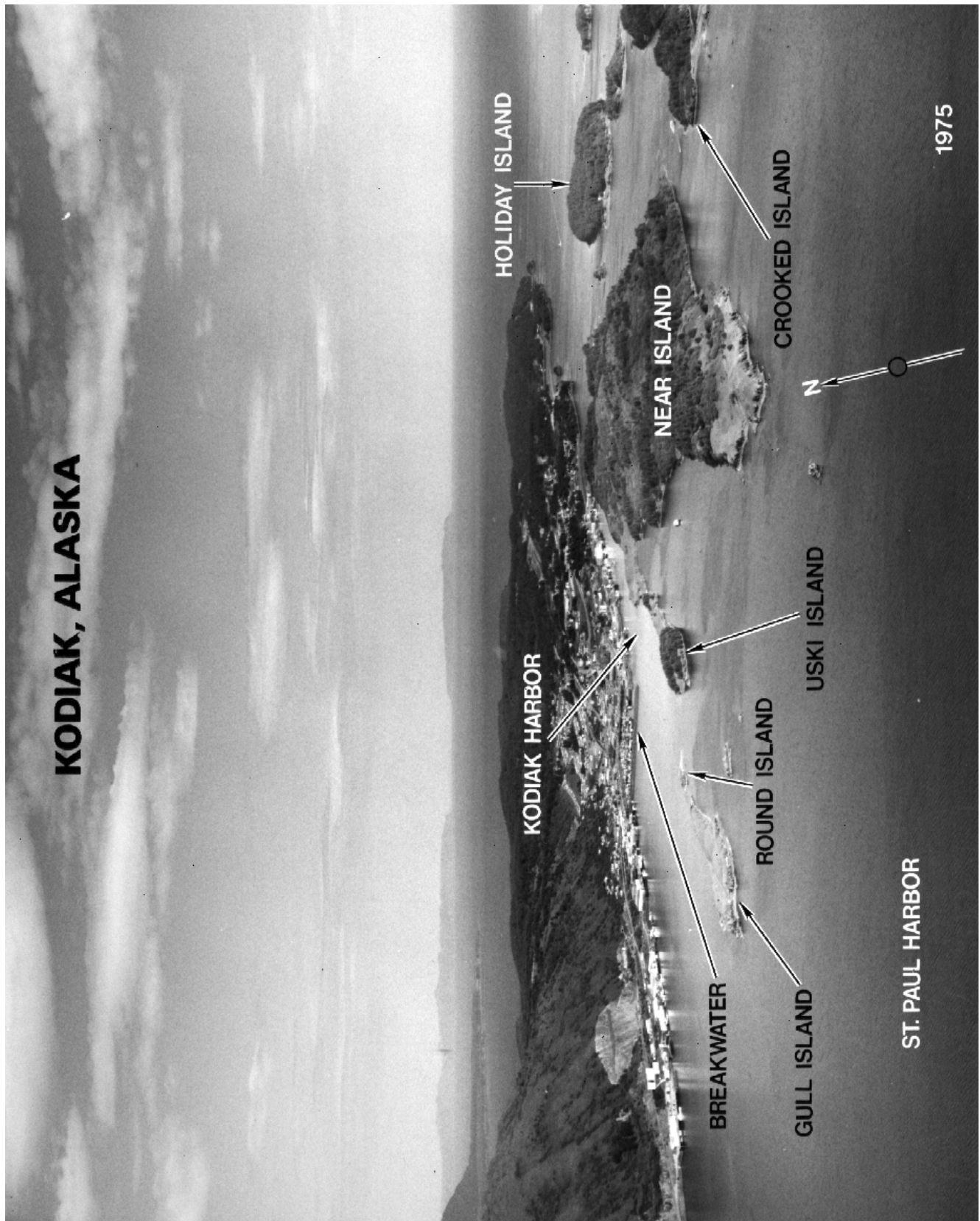
(291) Union Oil Pier: a T-pier just NE of the Kodiak City Pier 2, Cargo Terminal; 125-foot face, 180 feet total berthing space; 35 feet alongside; deck heights, 18 feet; receipt of petroleum products; bunkering vessels; 30-foot floating pier adjacent; gasoline, diesel fuel, and water are available; pipelines extend from wharf to storage tanks in rear, total capacity 35,700 barrels; owned by Union Oil Co. of Calif. and operated by Kodiak Oil Sales, Inc.

(292) There are many cannery wharves from the Union Oil Pier NE to the small-boat harbor.

(293) **Kodiak Small-Boat Harbor**, just SW of downtown Kodiak, is protected by two breakwaters. A light marks the outer end of the W breakwater. In 1975, depths of 8 to 12 feet were available in the basin. In April 1981, a submerged rock was reported in the entrance in the vicinity of Kodiak Boat Harbor Daybeacon 2; caution should be used in the area. The basin has 150 commercial berths, 66 berths for pleasure boats and skiffs, and 587 feet of transient space; contact the harbormaster for berthing assignments. Electricity and water are available on the floats. Two loading wharves, two boat grids, and a launching ramp are available. A seaplane float is just outside the basin. The basin is owned by the State and operated by the City.

(294) **Star of Kodiak Wharf**: E of the small-boat harbor; 200 feet of berthing space; 30 feet alongside; deck height, 20 feet; receipt of seafood; owned and operated by All Alaskan Seafoods, Inc.

(295) The STAR OF KODIAK, a grounded 440-foot ship, is used as a seafood processing plant and cannery.



(296) **Alaska State Ferry Terminal, City Pier No. 1:** a wharf just NE of the STAR OF KODIAK; 204-foot face; 28 feet alongside; deck height, 19 feet; landing for passenger and vehicular ferry; receipt of petroleum products; bunkering vessels; pipelines extend from wharf to storage tanks in rear, total capacity 41,700 barrels; owned by the City of Kodiak and operated by the State and Chevron, U.S.A., Inc.

(297) Vessels moored at the Ferry Terminal must be attended by a crew member at all times and be capable of moving on notice. No vessel may moor at the wharf when the amber light on top of the terminal building is flashing.

(298) **City of Kodiak, Transient Float:** 200 yards E of the Ferry Terminal; 425 feet of berthing space on each side; 28 to 30 feet alongside; deck height, 1½ feet; mooring transient vessels; owned by the State and operated by the City of Kodiak.

(299) Berthing assignments at the transient float are made by the harbor master; his office is on the NE side of the small-boat harbor.

(300) There are more private commercial wharves NE of the transient float for a distance of about 500 yards.

(301) A small-boat harbor, protected by two lighted breakwaters on its SW side, is at the head of **St. Herman Bay**, known locally as Dog Bay, between **Uski Island** and **Near Island**. In June 2000, the controlling depths were 1.48 to 1.75 fathoms in the entrance channel and basin.

(302) The National Marine Fisheries has a pier and New England Fish Co. has a wharf in Gibson Cove, 1.3 miles SW of Kodiak. There is a heavy surge in the cove during NE through SE gales. The entrance to the cove is foul, with rocks on either side, and an obstruction is 0.15 mile E of the entrance in 57°46'41.5"N., 152°26'17.0"W.

(303) **Supplies.**—Marine supplies and provisions are available in limited quantities. Water, gasoline, and diesel fuel are available at the Union Oil Pier and the Standard Oil facility at the Ferry Terminal.

(304) **Repairs.**—General repairs can be made by local machine, electronic, and welding shops.

(305) **Communications.**—Freight vessels call weekly. Alaska Marine Highway System has ferry service to Seward, Seldovia, Homer, Dutch Harbor, and connecting ports. Air transportation is frequent daily to Anchorage, and once daily to Seattle from Kodiak State Airport, which is about 5 miles SW of town. Charter air services are available at Kodiak Municipal Airport in town.

(306) Telephone, radiotelephone, and radiotelegraph communications are maintained.

(307) **Chart 16596.—Womens Bay,** SW of St. Paul Harbor at the extreme W end of Chiniak Bay, is the site of the Coast Guard Support Center, Kodiak.

(308) Prior to entering into the channel to Womens Bay, the master of the vessel must first obtain channel clearance permission from the Port Services Officer, Coast Guard Support Center, Kodiak, via 2182 kHz or 156.80 MHz.

(309) **Naval Defensive Sea Area and Airspace Reservation.**—Under the authority of Executive Orders 8717 of March 22, 1941, 8597 of November 18, 1940, and 9720 of May 8, 1946, the area in and about Womens Bay is a designated Naval Defensive Sea Area and Airspace Reservation. Restrictions imposed under the authority of the above executive orders have been suspended subject to reinstatement without notice at any time that the interests of national defense may require such action.

(310) **Channels.**—The entrance to Womens Bay is obstructed by numerous and extensive rocks and reefs; some are awash at extreme low water while others are up to 6 feet high. A 400-foot-wide buoyed channel passes through this foul area NW of Zaimka Island to deeper water inside. The channel is marked by buoys and a **211.1°** lighted range. The controlling depth to the wharves is about 29 feet.

(311) In the winter, buoys are often moved off station due to ice floes.

(312) **Cliff Point,** on the S side of the entrance to Womens Bay, is the end of a prominent 192-foot-high headland that is covered with grass and scattered brush; two prominent pinnacle rocks are among the reefs E of the point. Broken ground and rocks extend about 0.5 mile NE of the point. **Cliff Island,** 0.3 mile N of Cliff Point, is small and 62 feet high with steep cliffs on all but the SE side; pinnacle rocks are on the NE and S sides.

(313) **Zaimka Island,** the largest of the islands at the entrance to Womens Bay, is 151 feet high, bordered with cliffs, and covered with bushes and grass. **Blodgett Island,** 0.7 mile SW of Zaimka Island, is 70 feet high.

(314) **Nyman Peninsula,** on the W side of the entrance to Womens Bay, forms a protected inner bay. **Nyman Spit,** a submerged sandspit, extends about 800 yards SE from the S end of the peninsula; a lighted buoy marks its outer end.

(315) **Tides and currents.**—The diurnal range of tide in Womens Bay is 8.8 feet.

(316) In the outer part of Womens Bay, the currents follow the general direction of the channel, flowing SW on the flood and NE on the ebb with a velocity of about 1 knot. An eddy has been reported N of Blodgett Island which will set a vessel to the S at the strength of an ebb current; this should be guarded against. Also, the ebb current flows NE across Nyman Spit. Ships passing near the spit at such a time might experience a set onto it. There are marked eddies near **Frye Point** at the W end of Womens Bay. Although deep water is close to this point, ships should guard against passing too close to it.

(317) **Routes.**—Vessels entering Womens Bay, may approach from NE through the channel W of Woody Island, thence through the buoyed channel N of St. Paul Harbor Entrance Light, and then follow the marked channel SW into Womens Bay. From E and S, the approach is the same as that for the S approach to Kodiak until St. Paul Harbor Entrance Light is passed, and then follow the dredged channel which is buoyed and marked by a **211°** lighted range located at the west side of the peninsula terminating at Cliff Point. Special note should be taken of Nyman Spit, which extends 700 yards SE of Nyman Peninsula and is marked by a lighted buoy.

(318) Permission will not be granted for large vessels to navigate the channel to or from Womens Bay and between the shoal waters of St. Paul Harbor entrance after dark or during low visibility unless a qualified pilot is on board or the master assumes full risk. Nor will vessels, except at the master's risk, enter or depart from Womens Bay and between the shoal waters of St. Paul Harbor during periods of wind velocities of 35 knots or more, except in emergencies or extreme necessity, and then only by authorization of the Commanding Officer, Coast Guard Support Center, Kodiak.

(319) **Wharves.**—The Coast Guard's waterfront facilities are in Womens Bay on the NW side of Nyman Peninsula. They consist of three deep-draft wharves. The Coast Guard facilities are used only by U.S. Government vessels and commercial vessels han-

dling military cargoes. Mooring spaces are assigned by the Port Services Officer, Coast Guard Support Center, Kodiak.

(320) **Coast Guard Marginal Wharf** (57°43.4'N., 152°31.3'W.): 1,680-foot face; 27 to 39 feet alongside; deck height, 10 feet; (awash up to 1 foot at extreme high water); water and electricity are available; docking of U.S. Government vessels. This wharf is in poor repair and submerged broken fender pilings are at the face of the wharf.

(321) **Coast Guard Fuel Pier**: 250 yards NNE of the Coast Guard Marginal Wharf; 570 feet long; 29 to 34 feet reported alongside; deck height, 18 feet; water, electricity, and fuel for government vessels are available.

(322) **Coast Guard Cargo Wharf**: 500 yards NNE of the Coast Guard Fuel Pier; 1,015-foot face; 33 feet reported alongside; deck height, 18 feet; water and electricity are available; receipt of military cargo.

(323) **Local magnetic disturbance**.—Differences of as much as 20° to 40° from the normal variation have been observed just off the Coast Guard Cargo Wharf.

(324) **Chart 16593.—Middle Bay**, between Cliff Point and Broad Point, is exposed to NE weather. **Viesoki Island**, near midentrance, is 101 feet high, small, and flat topped with sheer rock bluffs. A rock that uncovers is 0.4 mile NE from the island.

(325) **Broad Point** is the end of a long peninsula separating Middle Bay from Kalsin Bay. Broken ground with some dangers extends 1 mile N from the point.

(326) **Kalsin Bay**, the largest indentation in the SW side of Chiniak Bay, provides anchorage for large and small vessels. The low valley between Kalsin Bay and Ugak Bay, 9 miles SW, is used as a portage.

(327) **Queer Island, Kalsin Island**, and other small islands in the W part of the entrance to Kalsin Bay, are surrounded by foul ground. A large expanse of reefs and small islands overspreads the E part of the bay.

(328) The foul ground can be avoided by entering Kalsin Bay 0.8 mile SE of Queer Island, then favoring the W shore. The recommended anchorage is 2 miles from the head about 0.5 mile off the E shore in 9 to 10 fathoms; this anchorage may be untenable during a NE storm. Caution is necessary to avoid the rock that uncovers 9 feet on the W side of the bay and the rock that uncovers 4 feet on the E side of the bay.

(329) A well defined channel along the E shore of Kalsin Bay leads to a V-shaped cove SE of **Svitlak Island**, where excellent anchorage for small vessels is afforded in any weather.

(330) **Routes**.—To reach the V-shaped cove SE of Svitlak Island from a position 1.2 miles 000° from Cape Chiniak Light, steer 267°, heading for **Kekur Island** with **Middle Island** summit on range, until the sharp point on the W end of Isthmus Bay bears 191°. Then turn left to course 240° and head for the large square rock S of Svitlak Island until abeam of the N end of Svitlak Island, then turn left to 220° and head for the point at the S entrance of the cove until the large square rock bears four points on the starboard bow. Then steer 180° and anchor in 6½ to 7 fathoms 400 yards off the S shore. To go farther into the cove requires local knowledge. The channel abreast Svitlak Island is narrow with shoal water on both sides; caution should be exercised to avoid depths of less than 10 fathoms. The shoal water on the E side of the channel is extensive and surrounds the point forming the N limit of the cove.

(331) **Isthmus Bay**, just E of Kalsin Bay, affords anchorage for vessels in S weather. The range of Kekur Island and the summit of Middle Island, course 267°, clears the dangers off the E end of Isthmus Bay. In an emergency, a vessel may be beached on the sand at the head of the bay.

(332) **Chart 16580, Kodiak Island, southeast coast**.—A comprehensive survey was made of the waters along the SE coast of Kodiak Island to and including part of Albatross Bank. A vessel equipped with echo sounding apparatus would be aided in determining its position by soundings taken while cruising over this area.

(333) The shoaler, outer parts of two extensive submarine plateaus form Albatross Bank. A trough of deep water lies between them and branches extend into both entrances of Sitkalidak Strait and toward Sitkinak Strait. A very regular trough, NE of Albatross Bank, leads directly from seaward to Chiniak Bay.

(334) A depth of 8 fathoms, rocky bottom, is in 56°22.5'N., 152°56.0'W. on Albatross Bank.

(335) **Chart 16593.—Cape Chiniak**, the SE point of Chiniak Bay, is low and wooded for 0.8 mile back and then rises to higher land. **Chiniak Island**, 0.5 mile NE of the cape, is flat and grass covered; numerous high bare rocks extend 1.1 miles NE from it. **Cape Chiniak Light** (57°37.7'N., 152°09.2'W.), 120 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the NW side of the island. An anchorage, 1.3 miles NW of Cape Chiniak Light, provides protection from S weather in 18 to 20 fathoms. The cape should be cleared by 1.5 miles to avoid the offshore rocks.

(336) **Cape Greville**, 2 miles S of Cape Chiniak, is fronted by several rocky islets. Broken bottom extends 0.8 mile NE from the cape. In approaching from the vicinity of Ugak Island, Cape Greville should not be mistaken for Cape Chiniak.

(337) The land is thickly wooded for about 5 miles S from Cape Chiniak, then to Narrow Cape it is bare except for scrubby brush in the gulches and valleys and some grass and scattered clumps of small spruce trees on the lower slopes. The valley, 8 miles S of Cape Chiniak, terminates in a sand beach.

(338) Submerged rocks and rocks awash extend up to 0.5 mile offshore for 8 miles S from Cape Chiniak, then they extend up to 1 mile offshore to Narrow Cape; there is thick kelp in the vicinity of Narrow Cape. Outside these areas the bottom is mostly sand and gravel with some rocky sections off the points. No anchorages are recommended along this coast.

(339) A 10-fathom bank is 8.3 miles 166° from Cape Greville.

(340) **Narrow Cape**, 13 miles S from Cape Chiniak, is flat, but gradually drops close to sea level about 0.3 mile back of the cliff, having the appearance of an island when seen off Cape Chiniak. From this low part, grassy slopes with a few scattered spruce trees roll gradually upward to the mountains N of Ugak Bay. The SE face of the cape is an abrupt grass-topped cliff, 165 feet high and 1.1 miles long.

(341) **Ugak Island**, 2.5 miles off Narrow Cape, is discernible against the distant background of higher mountains from well out to sea. A ridge over 1,000 feet high runs the full length of the island close to the offshore side. The shore is steep and rocky and fringed with rocks and reefs, except at the NW end where a grassy slope spotted with a few scattered spruces descends gradually to a sandspit.

(342) In February 1984, a submerged obstruction was reported about 1.2 miles S of Ugak Island in about 57°20'51"N., 152°16'39"W.

(343) A rock and sandbar extends from Ugak Island to the S tip of Narrow Cape; the least found depth near the middle is 6½ fathoms. Although not wire dragged, the passage is considered safe for moderate-sized vessels. It is regularly used by fishing boats of 8- to 10-foot drafts. Tide rips are experienced, particularly on and near the bar, except at slack water. These rips increase with strong NE winds, producing breakers and causing the false impression that the passage is foul. At such times the passage is dangerous for small craft.

(344) The **current** floods NE through the passage between Ugak Island and Narrow Cape. There are strong cross currents N and S of Ugak Island and tide rips near the shore.

(345) If the passage S of Narrow Cape is used to Ugak Bay, avoid the rock awash at minus tides 0.7 mile SW of the S tip of Narrow Cape, a rocky 4-fathom shoal 3.6 miles W of the cape, and a ½-fathom rock 6.6 miles W of the cape.

(346) **Ugak Bay** has its entrance between Pasagshak and Gull Points and extends W about 19 miles; its inner end branches into a basin at the N and a narrow arm at the S. In entering, vessels should pass S of the ½-fathom rock a little N of midentrance. Depths of 40 to 55 fathoms will be found 1 mile off the points along the S shore from the entrance to Saltery Cove, then the bottom abruptly shoals to about 16 fathoms and deepens again to about 45 fathoms near the junction of the basin and arm at the head of the bay.

(347) **Local magnetic disturbances.**—Magnetic boat compasses have been observed to swing 15° to 180° in Ugak Bay.

(348) **Pasagshak Point**, 4 miles W of Narrow Cape, is a prominent, narrow mountainous headland 894 feet high. The point presents the appearance of a pyramid when viewed from the SW.

(349) **Pasagshak Bay** is rectangular shaped, 1 mile wide at its entrance, and has its E side formed by Pasagshak Point. It is shallow a short distance inside and exposed to any existing swell.

(350) **Long Island**, the 127-foot-high island off the N shore of Ugak Bay W of Pasagshak Bay, is rocky and grass topped. It is surrounded by a reef and numerous rocky islets. Foul ground is between the island and the N shore and 1.2 miles SE of the island.

(351) **Portage Bay** is the rounded bight 4.5 miles W of Pasagshak Bay. This bay is identified by a small flat-topped, sheer-bluff islet 42 feet high in the middle of the entrance, and a pinnacle rock 34 feet high 270 yards SW from it. Both are surrounded by deep water. The bottom has a gentle slope toward the head of the bay.

(352) **Eagle Harbor** is an open cove on the S side of Ugak Bay, 5.5 miles from the entrance. Its NW point is marked by two pinnacle rocks. At the NW shore of the cove are several shacks of the deserted village of **Eagle Harbor**. There is no secure anchorage here. The cove is exposed to E swells.

(353) Between Portage Bay and Kalsin Bay, and between Eagle Harbor and Shearwater Bay are portages.

(354) **Saltery Cove**, on the N shore of Ugak Bay and 8.5 miles above the entrance, is a half-moon shaped bight. It is marked on its E extremity by a reef point surmounted by a pinnacle rock 32 feet high. The cove has a gently sloping sand and mud bottom, but shoals abruptly to flats along the shore. A rock is just outside of the flats near the head of the cove. The recommended anchorage is along the 10-fathom curve near the E end of the bight. This is regarded as the best general anchorage in Ugak Bay.

(355) **Hidden Basin**, the N branch at the head of Ugak Bay, has a slightly curving bottle-neck entrance. The controlling depth through the approach is only 5 feet. The channel is along the W shore of the approach. Strong currents are encountered in the entrance. Depths charted in the approach to the basin are reported to be inaccurate; this and the swift and turbulent current during periods of maximum and minimum flood make the entrance hazardous.

(356) The S branch at the head of Ugak Bay is about 7 miles long and about 0.5 mile wide. A rock, which bares 5½ feet at about half tide, is near the middle of the constricted part of the arm. The channel is S of the rock which may be avoided by keeping 200 yards off the S shore in 10 fathoms.

(357) **Gull Point** and the point 1.8 miles S have bold rocky faces with islets of massive rock close by. The small cove on the S shore of Ugak Bay W of Gull Point provides anchorage for small boats in S weather. A sand beach is at the head.

(358) The cove about 3 miles S of Gull Point is connected by a tidal channel to a marsh which is flooded at high tide. The bottom at the entrance to the lagoon and along the beach for about 1 mile N is sandy and apparently free from rocks. A rock, covered 2½ fathoms, is 0.8 mile NE from the rocky point at the S end of the cove.

(359) **Chart 16592.—Dangerous Cape**, on the SE coast of Kodiak Island between Ugak and Kiliuda Bays, is the S end of a ridge. On the S side of the cape is a bluff over 500 feet high. A large rock, about 30 feet high, is about 400 yards S of the cape.

(360) **Boulder Bay**, just W of Dangerous Cape, affords poor anchorage on hard sand bottom. There are numerous rocks several hundred yards offshore. These rocks are mostly submerged or awash at high water, and extreme care should be taken in navigating this bay.

(361) Inner and Outer Right Capes form a double cape 3.5 to 5 miles SW of Dangerous Cape. **Outer Right Cape** is comparatively low with eroded bluffs about 100 feet high; however, landslides extend almost to the summit of the mountains along the coast 1 mile NE of the outer cape. On a clear day these are recognized a long distance offshore. **Inner Right Cape** rises to 493 feet. Broken ground extends about 1 mile offshore between the outer and inner capes.

(362) **Kiliuda Bay** has its entrance between Left Cape and Inner Right Cape. It extends about 4 miles NW and then about 6 miles W.

(363) Indenting the NE side of Kiliuda Bay are Santa Flavia Bay and Shearwater Bay. The shore between these bays is fringed with islands and rocks.

(364) **Kiliuda Rock**, 2 feet high and about 1 mile W of Inner Right Cape, is on the range of the tangents of Inner and Outer Right Capes and about on the range of the small points along the W shore of Santa Flavia Bay. The rock is surrounded close-to by depths of 17 fathoms.

(365) **Santa Flavia Bay**, between Inner Right Cape and Ermine Point, is apparently clear in the center with depths of 12 to 15 fathoms, sand bottom, but is exposed to swells and seas accompanying SE weather. Kiliuda Rock should be avoided in entering.

(366) **Shearwater Bay**, the NE arm of Kiliuda Bay, is about 2.5 miles in extent. Rocks awash extend from either side of the entrance. In the entrance channel between the rocks there are depths greater than 20 fathoms for a width of 0.4 mile. The rocks extending 0.2 mile W of Pillar Point bare at low stages of the tide, and

shoal water extends about 200 yards channelward from the outermost rock. Near the outer end of the group of rocks on the NW side of the entrance is a dry patch of rock 3 feet high. The outermost rock uncovers and is 300 yards from the dry patch in a direction toward the head of the bay.

(367) **Pillar Point** marks the SE side of the entrance to Shearwater Bay. A small islet is about 110 yards N of Pillar Point. **Bluff Point**, 0.5 mile farther inside the bay, is marked by the eroding bluff of a knoll which overlooks the lowland back of Pillar Point.

(368) The small enclosure, back of the narrow strip of land at Bluff Point, provides secure shelter for small craft with local knowledge.

(369) About 0.7 miles from its head, Shearwater Bay contracts to a width of about 0.4 mile between **Observation Point** and the opposing point on the SE side. The ruins of a cannery are on Observation Point. Anchorage may be had about 0.3 mile beyond this contraction midway between the shores in about 6 fathoms, mud bottom, avoiding shoal water extending 200 yards N of the opposing point and the shoal depths adjacent to the flats along the NW side at the head of the bay.

(370) **Routes, Shearwater Bay**, from the southwestward.—Round Cape Barnabas 2 miles off and make good the following courses: (1) **331°** for 9.5 miles to Pillar Point bearing 069°, 1.4 miles; this course passes 1.1 miles off Left Cape and heads for Shearwater Point. (2) **048°** for 1.4 miles to Pillar Point abeam, 0.5 mile; this course heads for the deteriorating cannery wharf at Observation Point. (3) **056°** for 1.6 miles to anchorage.

(371) From the northeastward.—Round Dangerous Cape 3.5 miles and make good the following courses: (1) **276°** for 3.5 miles to Outer Right Cape (E end) bearing 000°, 2.5 miles. (2) **305°** for 3.4 miles to Inner Right Cape bearing 052°, 1.6 miles; this course heads for the tangent of the bold shore about 2 miles NW of Left Cape. (3) **330°** for 3.8 miles to Pillar Point bearing 069°, 1.4 miles; this course heads for Shearwater Point. Then follow courses (2) and (3) of the preceding paragraph.

(372) The N side of Kiliuda Bay is indented by an open bay about 1.2 miles wide between **Shearwater Point** and **Coxcomb Point**. Foul ground extends 0.3 mile from Shearwater Point to Coxcomb Point. A rock, 4 feet high, is 0.5 mile E of Coxcomb Point. The entrance channel is 200 yards E of this rock. A N course leads to the center of the open bay which has a depth of 3 fathoms. The bottom has a gentle rise to an extensive sand beach at the head. A vessel may be beached here in the event of an emergency.

(373) A rock, 45 feet high and 0.5 mile SW from Coxcomb Point, marks the outer limit of shallow depths. A triangular-shaped bank is outside the line drawn from the rock to Shearwater Point and N of **Pivot Point**. Anchorage depths on the bank are 14 to 17 fathoms, sand bottom.

(374) The point on the N side of Kiliuda Bay, about 3 miles to the W of Coxcomb Point, is a low grass-covered sandspit. The axis of a channel of deep water is 300 yards from the sandspit, and the 40-fathom curve is only 150 yards from the spit. Just S of this channel the depths are very irregular and the area should be avoided.

(375) **Left Cape** is a bold headland separating Kiliuda Bay from the E part of Sitkalidak Strait. The SE face of the cape is covered with a series of long rockslides extending almost to the mountain summit back of the cape. Numerous boulders are close inshore, and submerged rocks fringe the cape.

(376) **Sitkalidak Island**, about 18 miles long, is adjacent to the SE coast of Kodiak Island. The island is grass covered and in general devoid of trees. The easternmost mountain summit at Cape Barnabas is a good landmark from the E and SE.

(377) **Sitkalidak Strait** borders both the N and W sides of Sitkalidak Island, separating that island from Kodiak Island. Sitkalidak Passage is the name applied to the narrow part of the strait.

(378) That part of Sitkalidak Strait N of the Sitkalidak Island extends from the E entrance between Dangerous Cape and Cape Barnabas to Sitkalidak Passage. The broken bottom NE of Barnabas Rock had been examined with a wire drag and no dangers were revealed. This part of the strait is navigable by all vessels as far as Sheep Island, and offers several secure anchorages. The controlling depth through Sitkalidak Passage is 7 feet. The passage and its E approach are marked by lights and a lighted buoy.

(379) During June and July thick white fogs occur around the S end of Kodiak Island which sometimes last for several days. These fogs generally drift about the sea, but frequently do not enter the strait and adjacent bays. The E entrance to Sitkalidak Strait is frequently clear when a thick fog is less than 1 mile off-shore.

(380) **Cape Barnabas**, the E end of Sitkalidak Island, is marked by a conspicuous mountain 1,719 feet high. There are rockslides on the slopes of this mountain and a series of eroded bluffs along the NE face. Submerged rocks and rocks above high water border around the cape and numerous kelp patches are several hundred yards offshore. In thick weather this cape is usually easier to pick up than Dangerous Cape.

(381) Vessels making Sitkalidak Strait from the SE should pass Cape Barnabas 2 miles off and steer **321°**, heading for the NE tangent of Left Cape until Table Island Light bears 195°, then change course to **252°** and follow directions given below.

(382) **Barnabas Rock**, which uncovers about 3 feet, is 0.8 mile 075° from Table Island. The sea breaks over this rock at high tide when there is a moderate swell, but often in calm weather at high tide there is no indication of the rock. It has no kelp. The passage between the rock and Table Island is apparently clear and has been used by steam whalers operating from Port Hobron; but because of uncertain currents the passage is not recommended. The water between Table Island and Sitkalidak Island is foul with submerged pinnacles.

(383) **Table Island** is a flat-topped island about 100 feet high 2 miles WNW from Cape Barnabas. **Table Island Light** (57°11'21"N., 152°55'12"W.), 106 feet above the water, is shown from a small house with a red and white diamond-shaped daymark on the N end of the island.

(384) **Tanginak Anchorage**, the bight E of the entrance to McDonald Lagoon, is a good anchorage in S weather. A rock awash at low water is about 0.5 mile off the eroded bluff forming the W end of the bight. Shoal water is between the rock and the point.

(385) **McDonald Lagoon**, about 4.5 miles W of Table Island, almost divides Sitkalidak Island. It has a bottleneck entrance. A bar channel, 13 feet deep, is W of the ½-fathom shoal 0.2 miles NW of the bottleneck and follows the N side of the W entrance point until about 200 yards W of the bottleneck; here it is necessary to avoid a small shoal making out from the N side of the point. Strong currents run in the entrance and in N weather the bar breaks all the way across. Small vessels with local knowledge may enter the lagoon which deepens inside and has good holding ground.

(386) **Port Hobron** is the second deep-indenting bay along the N side of Sitkalidak Island W of Table Island. The bay is a good harbor for all vessels except during a NE gale, when a comparatively heavy sea enters the bay.

(387) A former whaling station and wharf in ruins are on the E side of Port Hobron.

(388) At the head of Port Hobron is a small settlement known as **McCord**. A cattle ranch is on the E shore.

(389) **Cathedral Island**, the largest island in Sitkalidak Strait, is in the middle of the strait at the entrance to Port Hobron. The island is 192 feet high and covered with grass. It is dome shaped, with steep eroded cliffs on all sides except on the S side. The best water is found passing S of the island.

(390) **Nut Island Light N** (57°12.2'N., 153°09.6'W.), 40 feet above the water, is shown from a square steel frame with a red and green triangular daymark 0.9 mile W from Cathedral Island.

(391) **Aberdeen Rock**, in the middle of Sitkalidak Strait 0.7 mile W of Nut Island, is covered 1 fathom. It is unmarked and breakers occur over it only in the heaviest NE weather at extreme low tide.

(392) The recommended passage in the vicinity of the three midstrait obstructions, Cathedral Island, Nut Island, and Aberdeen Rock, is to the S of them. To avoid Aberdeen Rock when using the passage and when in the vicinity of the rock, do not go N of the line between Nut Island Light N and Bush Point Light 2. The passage N of the three midstrait obstructions is clear and is used by local craft. **Three Sisters Rocks**, near the N shore, are low; after passing S of these when bound W in the N passage, care must be taken to stand well over toward the N shore in the vicinity of Aberdeen Rock.

(393) **Amee Bay**, 2 miles W of Port Hobron, is clear in midchannel and offers fair anchorage, but violent williwaws blow out of this bay in S weather.

(394) **Shag Rock**, 6 feet high, is about 150 yards N of **Cub Island** which in turn is about 2.4 miles W of Cathedral Island. Shag Rock forms an important turning point for vessels using the narrow parts of Sitkalidak Strait. It is reported that on the rising tide a S set is noticeable between Shag Rock and Bush Point.

(395) **Bush Point** is on the N shore of the narrow part of Sitkalidak Strait 2.8 miles W of Cathedral Island. **Bush Point Light 2** (57°13.1'N., 153°13.0'W.), 17 feet above the water, is shown from a skeleton tower with a red triangular daymark on the S extremity of the point.

(396) **Midway Bay**, known locally as **Sheep Bay**, is that part of Sitkalidak Strait between the narrows at Bush Point and Sitkalidak Passage. **Sheep Island**, 50 feet high, covers the central part of Midway Bay. The bay affords the best anchorage in the general vicinity of the strait. The recommended anchorage for large vessels is between Sheep Island and Bush Point; small vessels usually anchor NE of Sheep Island in 5 fathoms, sticky bottom.

(397) The through passage is S of Sheep Island. A shoal bar, strewn with boulders, extends W from the shoal area surrounding Sheep Island to the E end of the N shore of Sitkalidak Passage. The channel for entering Sitkalidak Passage borders the S side of the shoal area and bar. The shoal on the S side of this channel is marked by a lighted buoy. In 1993, a visible wreck was reported to be just N of the channel about 500 yards NW of the buoy.

(398) **Sitkalidak Passage** separates the N end of Sitkalidak Island from Kodiak Island and is the link between the two sections of Sitkalidak Strait. The controlling depth is only 7 feet through

the passage. The passage is fairly straight and about 1 mile long. Inside the E entrance the channel slightly favors the N shore; in the W half of the passage it slightly favors the S shore.

(399) **Sitkalidak Passage Light 4** (57°12'33"N., 153°16'33"W.), 30 feet above the water, is shown from a skeleton tower with a red triangular daymark on the N side of the W end of the passage.

(400) **Currents**.—The currents seem to meet at Sitkalidak Passage under ordinary conditions of wind and weather, but in strong S weather the current occasionally flows NE continuously. No current velocities have been measured, but it is estimated that the maximum velocity never exceeds 3 knots.

(401) **Routes**.—From eastward, enter Sitkalidak Strait on a midchannel course. Proceed to 0.5 mile 163° from the E end of Cathedral Island, thence 600 yards S of Nut Island Light N, thence 300 yards S of Aberdeen Rock, thence 150 yards N of Shag Rock, thence 175 yards S of Bush Point Light 2, thence 400 yards 155° from the W end of Sheep Island, thence 200 yards NE of Sheep Island Light 3, and leave Light 3 to port. From this point, make a slow left turn to enter the narrows, avoiding the shoals W of Sheep Island. Keep in midchannel through Sitkalidak Passage, favoring the SE side opposite Sitkalidak Passage Light 4. Continue on a midchannel course through the SW end of the strait.

(402) **Outer coast of Sitkalidak Island**.—For several miles W from Cape Barnabas, the outer coast is particularly bold and rocky and seldom free of breaking seas. A series of mountain peaks stands close to the rounded outline of this projecting coastal section.

(403) About 5 miles W of Cape Barnabas, a channel navigable by launches in moderate weather leads to a lagoon. Practically all of the lagoon dries at low water.

(404) **Partition Cove**, having a small islet in the center and separated from McDonald Lagoon by a low narrow neck of land, is foul.

(405) **Ocean Bay**, the pronounced indentation of the outer coast of Sitkalidak Island, has a wide sand beach several miles long. The waters adjacent to a long section of the beach are apparently free of rocks. A sheltered anchorage during prevailing SW weather may be found in 4 fathoms in the lee of the prominent rocky point marking the S end of the sand beach.

(406) On the coastal ridge between Ocean Bay and Black Point are two tips, 1,715 feet and 1,527 feet high, between which the ridge sags in a smooth curve. This feature may be recognized from seaward even against the distant background of higher mountains.

(407) **Black Point**, the SW end of Sitkalidak Island, is a low grass-covered cape sloping gently to the adjacent hills. It does not show darker than the surrounding country, but there are some low eroding bluffs around the cape and scattered boulders along the shore.

(408) A coastal shelf, approximately defined by the 18-fathom curve around Black Point, extends 4 miles offshore and spreads fan shaped about the point. Very broken bottom exists on the shelf. In some places the survey indicated rather deep water where live kelp appeared. It is recommended that Black Point be given a berth of at least 4 miles.

(409) That part of Sitkalidak Strait W of Sitkalidak Island extends from its S entrance between Black Point and Twoheaded Island to Sitkalidak Passage.

(410) The most prominent point on the SW end of Sitkalidak Island is at the W extremity of the coastal ridge back of the lowland in the vicinity of Black Point.

(411) **Ship Rock**, 6 feet high, is at the SE entrance of Sitkalidak Strait. Vessels should give the rock a wide berth to avoid the broken bottom extending almost 2 miles SW of it.

(412) **Puffin Island**, 75 feet high, is a grass topped irregular mass of rock 0.6 miles NE of Ship Rock. Several bare rocks, some of the pinnacle type, are near the island. The passages on either side of the island are not safe.

(413) **Tallapoosa Shoal**, with the least depth of 9 fathoms over it, is in the middle of the strait 3.5 miles NW of Ship Rock.

(414) **Rolling Bay**, the first bay on the E side of Sitkalidak Strait from the S entrance, has a sand beach and tide lagoon at the head, and a valley leads to Ocean Bay. The bay is exposed to the prevailing SW swell.

(415) A prominent rock, 83 feet high, having vertical sides and terminating in a dome-shaped top, is on the extensive reef projecting from the N point of Rolling Bay. A needle-top rock, 40 feet high, is near the point.

(416) **Sitkalidak Lagoon** is the upper part of **Natalia Bay**, the 5-mile inlet just N of Rolling Bay. The restricted entrance to the lagoon around the end of the spit is navigable only by small craft.

(417) **Natalia Peninsula**, the rectangular mountainous headland on the E side of Sitkalidak Strait opposite Cape Kasiak, has two knolls; one of these is at the NW end of the headland, the other is at **Natalia Point**, the SW end. A 3½-fathom shoal is 0.5 mile off the headland.

(418) **Newman Bay** is on the E side of Sitkalidak Strait opposite Three Saints Bay. A 5-fathom shoal is 0.5 mile off the N entrance point. Several dangers are near the S shore. A shoal of 4 fathoms extends 400 yards N of the point marked by a 50-foot elevation which appears as an island from a distance. Anchorage is available in 8 to 9 fathoms in the center of the upper bay.

(419) **Old Harbor** is a native village on the W side of Sitkalidak Strait 1 mile from the W end of Sitkalidak Passage. A school and a trading post are in the village.

(420) An L-shaped pier, at Old Harbor, has a 67-foot face with about 15 feet reported alongside. A dolphin is about 45 feet NE of the pier and parallel with the face.

(421) Commercial air service is available from Kodiak.

(422) **Pilotage, Old Harbor**—Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See Pilotage, general, indexed as such, chapter 3, for details.)

(423) The Kodiak Island area is served by the Alaska Marine Pilots and Southwest Alaska Pilots Association.

(424) Vessels using Southwest Alaska Pilots Association pilots and en route to Old Harbor can meet the pilot boat about 1 mile E of Cape Liakik (57°06.9'N., 153°27.0'W.).

(425) The pilot boat can be contacted by calling "OLD HARBOR PILOT BOAT" on VHF-FM channel 16 or on a prearranged frequency between pilot and agent/vessel.

(426) A **small-boat basin** has been dredged at the head of the unnamed cove on the W side of Sitkalidak Strait, about 700 yards N of Old Harbor. A marked dredged channel leads W from the strait to the basin. A diversion dike protects the basin on the N side, and a 240-foot-long groin on the S side of the entrance protects the channel from shoaling. In July 1998, the controlling depth was 7½ feet in the entrance channel and basin except for lesser depths along the W edge. The basin will provide protected

moorage at a 562-foot float in the SW end of the basin for resident and transient commercial fishing vessels.

(427) Between Old Harbor and the round point on the opposite shore, Sitkalidak Strait narrows to about 0.5 mile. The W half of this part of the strait is a sandy shoal having depths less than 3 fathoms. Some piles are at the S end of the shoal, 450 yards E of the L-shaped pier, at Old Harbor. A small reef, which uncovers 4 feet, is 100 yards off the E shore of the strait opposite Old Harbor.

(428) **Barling Bay** is the first bay S from Old Harbor. In NW weather violent williwaws blow out of the bay. The bay near its head affords excellent holding ground for small craft and is secure except in NW weather. The anchorage for large vessels is just inside the entrance.

(429) A broad grass-covered sandpoint projects into Sitkalidak Strait forming the S entrance point of Barling Bay. One mile S of the point and about 0.6 mile off the W shore of the strait are a cluster of dangerous rocks marked by kelp. The least depth over them is 1 foot at low water. The outermost rock is 0.9 mile 204° from the point. The area between the rocks and the W shore is shoal.

(430) **Three Saints Bay**, on the W side of Sitkalidak Strait, affords anchorage at the head in 14 to 18 fathoms, mud bottom. At the entrance, which is between Cape Liakik and Cape Kasiak, a shoal borders the SW shore.

(431) A spit, with some rocks awash, and covered 2¾ fathoms near its outer end, extends about 0.6 mile SSW of **Cape Liakik**. **John Island**, 90 feet high, is near the outer end of the spit, with another islet between it and Cape Liakik. Foul ground extends from John Island to a submerged rock 2.2 miles N and about 150 yards off the E shore.

(432) A course through the middle of the entrance leads between the shoal on the SW shore and a 4-fathom shoal 0.5 mile NNW of John Island.

(433) The first Russian settlement on Kodiak Island was established on this bay in August 1784 and named for the vessel THREE SAINTS.

(434) The cannery on the sandspit on the W side of Three Saints Bay, was destroyed by fire in 1931. The face of the cannery wharf remains. Depths at the wharf are 11 feet at the NW corner, 4 feet about 5 yards farther inshore, and 24 feet at the downstream corner. SE of the wharf the low water shore areas extend beyond the line of the face of the wharf. A port landing is always made. With a heavy wind broadside on, it is impossible for a vessel under her own power to leave the wharf.

(435) An excellent anchorage for small vessels is in the cove formed by a long sandspit inside the entrance on the SW side of the Three Saints Bay. A vessel about 65 feet long may anchor here.

(436) Two streams enter at the head of Three Saints Bay draining separate valleys. The S valley is said to have a trail leading across Kodiak Island to Uyak Bay.

(437) The three rocky peaks on the ridge that terminate at the headland at the turn of Three Saints Bay are locally known as **The Three Saints**. The peaks are over 3,000 feet high and when clear form a leading mark at sea for identifying the S entrance to Sitkalidak Strait.

(438) **Cape Kasiak** is a prominent headland on the W side of Sitkalidak Strait S of the entrance to Three Saints Bay.

(439) **Kaiugnak Bay** and **Kiavak Bay**, collectively known as **Wide Bay**, indent the W shore of Sitkalidak Strait between Cape Kasiak and **Cape Kiavak**. A small shoal of 3½ fathoms is 1 mile

SW of Cape Kasiak. A shoal of 2 fathoms is near the middle of the upper part of Kaiugnak Bay. A rock, which uncovers 5 feet, is 0.5 mile NE of Cape Kiavak, and a rock awash, about 700 yards offshore, is about 1 mile NW of the cape. There are two lagoons, one at the head of each bay; neither permits entrance except at high water. A large waterfall is in the NW branch of Kaiugnak Bay.

(440) Anchorage for all weather except E gales is provided in the SW part of Kaiugnak Bay. Large vessels should not proceed W of a line bearing S from the small island off the projecting point at the head of the bay.

(441) **Knoll Bay** is about 2.5 miles S of Cape Kiavak and N of Twoheaded Island.

(442) The coast from Cape Kiavak to the N entrance point of Knoll Bay is foul for 0.3 mile offshore. The coast and shore of the bay are fringed with covered and visible rocks, which extend about 0.2 mile offshore.

(443) **Knoll Point**, the S entrance point to the bay, is fringed with many dangers. A rock awash, marked by kelp, is about 0.4 mile E of the point, and a large group of rocks, with kelp close E, are about 0.5 mile S of the point.

(444) Anchorage in Knoll Bay may be had in 12 fathoms during W weather, and small craft may anchor under the bluff in the S corner of the bay.

(445) **Chart 16590.—Twoheaded Island**, off the S extremity of the W shore of Sitkalidak Strait, rises to two irregularly rounded peaks; the higher, 1,837 feet, is NE of the S extremity of the island, and the lower, 1,724 feet, is W. A ridge, 1,442 feet high, extends along the NE part of the island.

(446) The coast of the island is bold and precipitous, with numerous large boulders and rocks awash along the shores. Two bare rocks, 24 and 28 feet high, are near the SW shore. The 28-foot rock is block shaped and the 24-foot rock is shaped like a finger pointing up from a heavy base.

(447) The passage N of Twoheaded Island, to Japanese Bay and Kaguyak Bay, has a channel width of 0.8 mile. In navigating the passage, vessels should avoid the foul area extending S of Knoll Point and favor Twoheaded Island.

(448) **Japanese Bay**, consisting of an inner and outer bay, is narrow and has its entrance 2 miles NW of Twoheaded Island. A rock, covered 2 fathoms and generally not marked by kelp, is in the middle of the entrance. Broken bottom extends NE of the rock to a group of large rocks, 60 feet high, which overspread the E part of the entrance. The E and W shores of the bay are fringed with many submerged and rocks awash. The channel for entering the bay is W of the 2-fathom rock.

(449) Vessels may anchor near the head of the outer bay. After entering proceed midchannel until the inner tangent of the group of large rocks in the entrance is in range with the outermost of the two high rocks off Twoheaded Island. Then anchor in 15 to 16 fathoms, mud bottom.

(450) The restricted entrance to the inner bay is about 190 yards wide. The channel curves around the end of the gravel spit, but has a depth of 11 fathoms. A vessel may be beached on the N side of the spit. It has been reported that vessels should avoid anchoring NW of the spit, as the holding ground is poor. Several vessels have reported being blown ashore in heavy NE weather.

(451) **Cape Kaguyak** is about 2 miles SW of Twoheaded Island and between them is the passage leading to Japanese Bay. The area in the vicinity of the cape is foul. The 163-foot rocky islet at

the SE tip of the cape has the appearance of a huge sun dial. The outermost danger is a rock, covered 2½ fathoms, 0.6 mile NE of the cape. **Kaguyak Bay**, immediately W of the cape, affords anchorage at the head of the bay in 6 to 9 fathoms from W and S winds. With NE winds small craft may find a fairly comfortable anchorage under the bluff on the SE side of the head of the bay.

(452) The coast of **Aliulik Peninsula** from Cape Kaguyak to Cape Trinity, the SW extremity of Kodiak Island, is bordered by foul ground. Extensive foul areas also surround Geese Islands and Aiktalik Island which are along this coast. Geese Channel is not navigable except for small vessels, and ships proceeding along this coast pass through Sitkinak Strait. Old Kaguyak Bay and Russian Harbor provide anchorage for small vessels.

(453) The southernmost peak, 2,215 feet high, on Kodiak Island, is about 5 miles W of Cape Kaguyak. This detached mountain is regular in outline and forms a distinctive mark. From the mountain toward Cape Trinity is a long gradual slope.

(454) **Flat Island**, about 0.9 mile off the entrance of Old Kaguyak Bay and 6 miles SW of Twoheaded Island, is flat topped and 119 feet high. This island has sheer rocky bluffs. A pinnacle rock, 38 feet high, and another rock outside of it, are close to the SW end of Flat Island. The rocky reef extending 0.7 mile to the NE shows in small groups of rocks.

(455) A channel is between Flat Island and the mainland; its width is narrowed by heavy kelp beds on either side.

(456) **Old Kaguyak Bay** affords protection to small craft in N weather. A rock, 28 feet high, is in the center of the entrance and a rock, which uncovers about 3 feet, is 100 yards SW of the elevated rock. To enter pass between the elevated rock and Boot Point but favor the shore around Boot Point to avoid the rock that uncovers 3 feet. Anchor in about 3 fathoms, sandy bottom, a little N of the center of the bay.

(457) **Boot Point**, forming the W side of the entrance of Old Kaguyak Bay, is marked by a humped hill 496 feet high.

(458) About 0.5 mile SW of the W extremity of the headland forming Boot Point are two islets close together. The highest part, the N end of the W islet, is 41 feet. The islet 0.2 mile farther offshore is 19 feet high. The islet 0.1 mile inside is 10 feet high.

(459) **Geese Islands**, three in number, are flat in appearance, the E and highest is 150 feet high. The passages between the islands are dry at low tide and the area for 1 mile S of the islands is foul.

(460) A reef and shoal area extends 3 miles E from the E Geese Islands, terminating in a rock covered 2½ fathoms. The rock breaks in a moderately heavy sea but not in ordinary weather. The reefs, 1 mile inside of the rock, bare 4 to 7 feet. It should be noted that the bottom shoals very abruptly in this locality.

(461) **Aiktalik Island**, about 2.5 miles W of the westernmost of the Geese Islands, shows as two knolls; the E one, 308 feet high, is the sharper and higher. The area S of the island is foul for 1.5 miles offshore.

(462) A cylindrical grass-covered rock, 50 feet in diameter and 58 feet high, stands on the shore reef at the W end of Aiktalik Island.

(463) **Sundstrom Island** is just off the SW end of Aiktalik Island. Several wart-like projections rise above the general level of the island which is about 70 feet; the highest is 158 feet. The shores consist of rocky bluffs.

(464) The passage between Sundstrom and Aiktalik Islands should prove useful to small craft in that it avoids the whirlpools and tide rips around the SW point of Sundstrom Island. Both sides of the narrow passage are lined with heavy kelp but the

midchannel is clear of kelp and has a controlling depth of about 2½ fathoms.

(465) The passage between Aiaktalik and Geese Islands is navigable for small vessels and has a controlling depth of about 6 fathoms. The chart is the best guide.

(466) The passage between Kodiak Island and the chain composing Aiaktalik Island and Geese Islands, via Geese Channel and Russian Harbor, is used considerably by small local vessels.

(467) **Geese Channel**, the passage N of Geese Islands, has a controlling depth of about 3¾ fathoms. Shoals and reefs are scattered in the passage. Three buoys mark the channel; they are numbered from E to W. Heavy kelp marks the shoal patch 0.5 to 0.9 mile W of the W island of the Geese Islands. In October 1979, a submerged obstruction was reported at the W end of the channel, about 200 yards SE of Geese Channel Lighted Bell Buoy 4.

(468) **Russian Harbor**, between Aiaktalik Island and Kodiak Island, is a temporary anchorage in moderate weather, in about 8 fathoms, hard sand bottom. There is but little shelter, and strong tide rips are frequent.

(469) In general it is difficult to make courses good passing through Russian Harbor because of the strong currents, swirls, and eddies. **Aiaktalik Island Light 5** (56°43.9'N., 154°02.9'W.), 57 feet above the water, is shown from a square frame with a green square daymark on the N point of the island. A middle ground in Russian Harbor has depths of 2½ fathoms.

(470) In **Aiaktalik Cove**, the seas and wind sweep around the point in moderate weather, making the cove an uncomfortable anchorage. The best anchorage for small vessels, affording excellent protection from the prevailing NE weather, is on the Kodiak Island side of Russian Harbor. This anchorage is 0.8 mile N of the point 3.4 miles E of Cape Trinity, opposite a stretch of sand beach in a break of the shore reef. The anchorage is in 4 fathoms, soft sand bottom.

(471) **Sitkinak Strait** is the broad strait lying between Trinity Islands and Kodiak Island. It is navigable for large vessels.

(472) The E approach is marked by Geese Islands on the N and **Cape Sitkinak**, the E end of Sitkinak Island, on the S. As viewed from seaward, this end of Sitkinak Island shows as precipitous dark rock and shale bluffs dominated by two peaks or heads; the N one is 605 feet high and the S one is 821 feet.

(473) Two groups of two bare rocks are 0.5 mile and 1 mile off Cape Sitkinak. The outer group, light gray in appearance, is 17 feet high, and the inner group is 13 feet high. Rocks awash are outside of the outer group of bare rocks.

(474) An extensive fan-shaped reef, the limits of which are marked by thick growing kelp, extends almost 2 miles E and S of the SE point of Aiaktalik Island. It is made up of two rocky ledges and many individual rocks, most of which uncover. It is believed that the rock on which the PAVLOF struck is located near the edge of this reef.

(475) A bank of considerable extent, with a least depth of 4¼ fathoms, is near the middle of Sitkinak Strait about 2 miles N of Whirlpool Point.

(476) **Whirlpool Point**, N point of Sitkinak Island, is low, flat, and sandy. **Whirlpool Point Light** (56°37.0'N., 154°05.5'W.), 51 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the point. The tower is reported to be a good radar target.

(477) **Currents**.—The currents in Sitkinak Strait set WNW on the flood and ESE on the ebb. There are heavy tide rips in the strait particularly SW and W of Aiaktalik Island. So far as ob-

served, they are heaviest with a W wind and a flood current. The tide rips are often dangerous for small vessels. At times when the current opposes seas from E in the vicinity of Whirlpool Point, the seas become very steep. Current predictions for Sitkinak Strait may be obtained from the Tidal Current Tables.

(478) **Routes, Sitkinak Strait**.—A rocky ridge on Albatross Bank on which a depth of 8 fathoms was found, is in the seaward approach to Sitkinak Strait from the SE. The ridge is about 42 miles 105° from the summit of Sitkinak Island. It should be avoided.

(479) Enter the strait on a **270°** course passing about 4.3 miles N of Sitkinak Cape and 1 mile off Whirlpool Point Light. Continue on this course for 4 miles until Dolina Point bears 190°. Then change to **000°** and continue to a position 2.2 miles W from Cape Trinity. Due regard must be had for the strong currents in this strait.

(480) If bound for Alitak Bay, follow routes given later in this chapter.

(481) **Chart 16580**.—**Albatross Bank**, about 45 miles off the SE coast of Kodiak Island, has depths of 8 fathoms to about 61 fathoms.

(482) An area, having depths of 12 to 20 fathoms and covering about 50 square miles, is between 153°00'W. and 153°20'W., and between 56°20'N. and 56°28'N. The bottom characteristics noted on this area include gray mud, fine black sand and gravel, and rock. Kelp has been seen in this area at various times. On occasion, moderate tide rips have been noted.

(483) A rocky shoal is a short distance to the E of the large shoal just described. The depths range from 8 to 20 fathoms with a very irregular rocky bottom. The shoalest part, in 56°22.5'N., 152°56.5'W., is a sharp rocky ridge with a depth of 8 fathoms. Currents with a velocity of about 3 knots were observed in this area. It should be avoided in heavy weather because of possible breakers.

(484) A 16-fathom bank is in 56°40'N., 152°10'W. There may be less water. This shoal is separated from the shoals previously described by an extensive trough of deep water. This trough extends N, and branches extend into both entrances of Sitkalidak Strait and toward Sitkinak Strait.

(485) **Trinity Islands**, off the S end of Kodiak Island, consist of Sitkinak and Tugidak Islands inhabited only by occasional hunters and fishermen in the summer and trappers in winter. Unsurveyed areas include the SW coast of Sitkinak Island and all of Tugidak Island except the N end. Soundings in these unsurveyed areas are from reports.

(486) The island beaches are heavy shingle, gravel, and in places fine sand; a few alder bushes are on both islands. Landings are easy with offshore winds, but with any change the sea makes up rapidly. Water can be obtained from the ravines and pools on the islands.

(487) **Sitkinak Island** (see also chart 16590), the E island, is divided into two parts by **Sitkinak Lagoon**, which is navigable through the N entrance by small vessels, except during E swells or seas. The S entrance, fringed with rocks that uncover, should be attempted only with a calm sea; a small launch may enter at high water. The lagoon is a flat traversed by tidal channels, which are fairly deep near and inside the entrance, but the connecting channel between them is only 3 feet deep at high water.

(488) **Sitkinak Dome**, 1,600 feet high, prominent, and with a smooth rounded top, dominates the W side of Sitkinak Island. A parabolic antenna is just NE of the dome.

(489) The E end of Sitkinak Island and Whirlpool Point have been described under Sitkinak Strait.

(490) The island E of the lagoon is composed of many hills, some of which are separated from one another by low valleys. The NW side of the island, SW of **Dolina Point**, is made up of earth cliffs several hundred feet high, broken by narrow ravines.

(491) The S coast of Sitkinak Island is foul and should be avoided. Kelp beds extend 0.5 to 2 miles off the E and S shores. A bank with its center 9.5 miles SSW from Cape Sitkinak has not been fully surveyed. The bank has depths of 11 fathoms to 20 fathoms, and covers an area about 0.5 to 1.5 miles wide and about 6 miles long. It extends in a NNE-SSW direction and is an extension of an extensive area along the S coast of Sitkinak Island having depths less than 20 fathoms with irregular bottom in most places.

(492) A temporary anchorage is off the S entrance to Sitkinak Lagoon. This part of the S coast of the island is recognized offshore by the flatland at the lagoon. A prominent rocky point with an arched opening 50 feet high marks the entrance to the lagoon. To reach this anchorage from outside the 20-fathom curve, steer for the point with the arched opening bearing **026°**, and anchor in not less than 11 fathoms about 1 mile from the point.

(493) **Tugidak Passage**, between Sitkinak and Tugidak Islands, has very strong and freakish tidal currents and rips. Only the N approach has been surveyed. The S approach is apparently blocked by shoals. Tide rips in the middle of the passage are extremely dangerous to small boats and should be avoided by hugging the Tugidak Island shore.

(494) **Tugidak Island**, in its N part, is chiefly sandflats, but little above high water. A level boulder patch that uncovers is 0.5 mile off the N coast of Tugidak Island, 5 miles W of Tugidak Passage.

(495) The higher parts of the island are low grassy sandhills which terminate in bluffs in places along the shores. The N part is separated from the S or higher part by a large lagoon having one entrance from the SE.

(496) The lagoon is reported to bare, except near the SW side of the entrance where there is a pocket or basin of about 5 to 6 fathoms, sand bottom. The basin is a suitable anchorage for small boats, and is protected from the sea by a long sandspit that extends E from the entrance point on the SW side. A narrow channel follows the SE side of Tugidak Island, however, it is almost bare at low water so passage in and out is possible only at half or greater tide.

(497) In 1909, Mr. S. Applegate located the foul and broken area which extends about 10 miles S from the S end of Tugidak Island, as shown on the chart, by compass bearings on Tugidak Island and the summit of Sitkinak Island. Until a survey is available it is considered unsafe for vessels to cross this area. The bottom is very uneven, the depths changing abruptly from 2 to 4 fathoms in places, and boulder reefs with little depth may be expected. There are strong currents and heavy rips and overfalls.

(498) The waters off the N end of Tugidak Island have been surveyed. The general absence of kelp in this comparatively shoal area may be taken as an indication of the existence of but little if any ledge rock. The bottom apparently is composed of loose material including boulders leveled down by the action of the sea to form the more or less flat area of this region of 5 to 7 fathoms.

Slight shoaling occurs in patches where apparently there is a pre-dominance of boulders resisting the general leveling action of the sea.

(499) The N and W sides of Tugidak Island may be generally approached as close as 1.5 miles in good weather by a careful use of the lead. Care should be exercised near the middle of the W side of the island, as an unsurveyed bank reported to be covered as little as 2 fathoms is possibly 2 or 3 miles off. Anchorage can be found on the E side of the island between the entrance to the lagoon and the foul area extending off the S end.

(500) Ptarmigan have been found in great number on Tugidak Island.

(501) **Chirikof Island** (see also chart 16013) is about 60 miles SSW of the Trinity Islands. The S part of the island has bold, high peaks and bluffs, from which it gradually slopes to the N end, terminating in a low, green undulating country. An islet is near the SE end. The island is easily recognized and is visible for many miles in clear weather.

(502) The S shore of Chirikof Island is a Steller sea lion rookery site. There is a 3-mile vessel exclusionary buffer zone around the southern half of the island. (See **50 CFR 223.202**, chapter 2, for limits and regulations.) In emergency situations anchorage may be found in the bight at the SW corner, **Southwest Anchorage**, at the mouth of the stream and opposite the houses; or in 10 fathoms, on the W side off the bluff just S of the stream, possibly 2 miles from the NW point. Anchorage can also be found in the wide bay on the NE side of the island. In May-June 1978, it was reported that depths less than those charted were in this area, possibly due to the March 1964 earthquake. Anchorage difficulties may be experienced in heavy weather due to williwaws and limited swinging room. Foul ground is between Chirikof Island and the islets W of it. These islets are known as **Round Rock**, which is the largest and resembles a haystack, and **Nagai Rocks**.

(503) On numerous occasions breakers have been observed off the S end of Chirikof Island. The position of the breakers is reported to be 55°42'N., 155°36'W. A least depth of 4 fathoms was reported on the reef. The area of possible shoal water does not appear to be over 50 to 100 yards in diameter.

(504) A shoal is reported to extend from the E side near the middle of the island; breakers have been reported 3 miles 114° from the middle of the island. A breaker is reported in an estimated position 4 miles ESE from the SE point of the island. A shoal with kelp is reported to extend about 1 mile W from the NW point of the island.

(505) In 1923, the U.S.S. **CARDINAL** was wrecked on the E side of Chirikof Island and the survey ship **DISCOVERER** while engaged in rescue work struck a reef about 1.5 miles offshore.

(506) The wide passage between Chirikof Island and Tugidak Island has not been adequately surveyed. From widely scattered soundings taken in this locality, it appears that a submarine ridge with depths less than 19 fathoms extends from one island to the other. Foul and broken bottom extends about 10 miles S from Tugidak Island. Fairly regular depths across the ridge are indicated in the more closely sounded area 10 miles N of Chirikof Island. Tugidak Island is low and featureless and cannot be used as a navigational guide in the passage. Vessels bound for Chignik from the E use this passage.

(507) **Currents.**—Between Sitkinak and Chirikof Islands the general set of the current is reported to be about 249°, 0.5 knot. The current between Chirikof Island and Lighthouse Rocks has a S set, less than 0.5 knot. From Lighthouse Rocks to Kupreanof

Point the current sets generally 260° and varies from 0.3 to 0.7 knot.

(508) On three runs between Chirikof Island and Castle Rock on the Shumagin Islands, a S set was experienced each time, an average of as much as 1.5 knots having been noted.

(509) Vessels crossing the Gulf of Alaska westbound are often subjected to a strong N set and should verify their position by sounding when approaching the meridian of Chirikof Island. It was this N set in conjunction with thick weather that was responsible for the loss of the *CARDINAL* in 1923.

(510) **Charts 16590, 16591.**—**Alitak Bay**, at the S end of Kodiak Island has its entrance between Cape Alitak and Cape Trinity, and extends 26 miles in a N direction to the head of Deadman Bay. Lazy Bay is a good anchorage.

(511) The country is treeless and except for outcropping ledges of bare rock on the knolls and peaks, the land is covered by thick moss and grass. A herd of reindeer is maintained in the vicinity of Lazy Bay by the natives.

(512) The prominent feature in the approach is Twin Peaks on the peninsula between Lazy Bay and Kempff Bay. It can be seen from off Cape Ikolik on a clear day. The peninsula between Kempff Bay and Olga Bay is mountainous and rises to 2,000 feet.

(513) **Pilotage, Alitak.**—Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See Pilotage, general, indexed as such, chapter 3, for details.)

(514) The Kodiak Island area is served by the Alaska Marine Pilots and Southwest Alaska Pilots Association.

(515) Vessels using Southwest Alaska Pilots Association pilots and en route to Alitak Bay can meet the pilot boat about 2 miles SE of Cape Alitak (56°50.7'N., 154°18.2'W.).

(516) The pilot boat can be contacted by calling "ALITAK BAY PILOT BOAT" on VHF-FM channel 16 or on a prearranged frequency between pilot and agent/vessel.

(517) **Cape Trinity**, the S entrance point to Alitak Bay, is a tableland terminating in an almost vertical bluff. Rocks and reefs extend a short distance off the cape.

(518) **Cape Alitak**, the N entrance point of Alitak Bay, is the S end of a sloping ridge with numerous knolls. It is partly grass covered with much bare rock. Deep water extends close up to the cape on its SW side, but a long shoal of fine gray sand makes off its SE side in the direction of Cape Trinity. Numerous rocks are also close off the N, E, and W sides of the cape. The 10-fathom curve extends 3 miles off the cape and the 5-fathom curve is about 1.3 miles off. At the outer end of the shoal the depth increases rapidly to 20 fathoms. **Cape Alitak Light** (56°50.6'N., 154°18.3'W.), 63 feet above the water, is shown from a small house with a red and white diamond-shaped daymark on the S end of the cape.

(519) **Lazy Bay**, 4 miles NE from Cape Alitak, is well marked by Twin Peaks and Egg Island on its N side, and some white rocky ledges close to its S entrance point. The shore S of the entrance is clear if given a berth of 0.4 mile with the exception of the shoal making off the SE side of Cape Alitak.

(520) A cannery with a wharf, operated by the Columbia-Wards Fisheries, is on the N shore about 1 mile W from Egg Island. The wharf is 180 feet long with 30 feet reported alongside the face. Water is available at the wharf, and the cannery has limited machine shop facilities. Diesel and fuel oils are stored in some quantity for cannery use. The cannery season is May through Septem-

ber. Caretakers man the cannery in the off-season. The cannery monitors VHF-FM channel 16 and 4125 kHz single sideband (SSB); call sign is KBL-75. VHF-FM channel 79A is used as a working frequency; 2450 kHz SSB is also available. Telephone service is available at the village of Akhiok. The cannery maintains a store seasonally. A nurse or first aid technician is available during the canning season, but there are no hospital accommodations. Injuries or illnesses requiring hospitalization are flown to Kodiak. Air service is available to and from Kodiak on Tuesdays and Fridays during the off-season, and six days a week during the open season.

(521) A slipway capable of hauling out vessels up to about 130 tons, with a maximum draft of 6 feet forward and 8 feet aft is at the cannery.

(522) The N part of the bay beyond the sandspit above the cannery consists of mudflats and many boulders.

(523) Anchorage in 9 to 15 fathoms, mud bottom, may be had between the cannery and the E entrance point to Rodman Reach. With E gales the wind blows directly in Lazy Bay and there is little room in case of dragging or parting a cable. Northwesters blow with great force into Lazy Bay from over the ridge back of the head of the bay. Small craft can find excellent shelter and smooth water in the entrance to Rodman Reach during E weather.

(524) **Rodman Reach** is a narrow arm that extends SW from Lazy Bay and inside of **Tanner Head** to Cape Alitak where it forms a shallow basin from which **Alitak Lagoon**, also shallow, extends 3 miles N, being separated from the sea by a narrow shingle spit. About 100 yards off the E entrance point are two rocks awash. Excellent shelter for small craft will be found in the entrance to Rodman Reach.

(525) **Egg Island** is the low, flat rocky islet off the N entrance to Lazy Bay. **Lazy Bay Light 2** (56°53.5'N., 154°13.0'W.), 25 feet above the water, is shown from a skeleton tower with a red triangular daymark on the S side of the island.

(526) **Twin Peaks**, between Lazy and Kempff Bays, are a mark from as far W as Cape Ikolik. **North Twin Peak**, the higher one, is 1,494 feet and **South Twin Peak** is 1,310 feet. Both peaks are fairly definite, devoid of vegetation, and very rocky and stony. From the W they are first raised as an island.

(527) **Kempff Bay**, on the N side of Twin Peaks, is too deep for convenient anchorage and on its N side has broken bottom that should be avoided. There are neither settlements nor improvements in Kempff Bay.

(528) Favoring somewhat the S shore through the bay, anchorage can be selected near the head in about 18 fathoms. A spit with deep water close-to extends 350 yards from the N shore at a point 0.7 mile from the head.

(529) A reef, covered at high water, is between **Drake Head** and **White Rock**, and extends 0.5 mile from the shore just S of Kempff Bay. White Rock, 10 feet high, should be given a berth of 0.3 mile when passing E of it in Alitak Bay and the same distance when passing N of it entering Kempff Bay.

(530) **Akhiok**, a native village on the beach of **Akhiok Bay** about 1.5 miles NE from Kempff Bay, has a schoolhouse and a Russian Orthodox Church. The village has telephone service. A foot trail leads from the cannery at Lazy Bay to Akhiok. Akhiok is best reached by launch via the passage from Kempff Bay. This passage is shoal and has many rocks. A pilot can usually be obtained at the Lazy Bay cannery.

(531) **Round Hill**, 193 feet high, is a symmetrical, round grassy knoll at the E end of **Akhiok Island** which forms the N side of the entrance to Kempff Bay.

(532) **Akhiok Reef**, awash at extreme high water and always showing, is a group of black jagged rocks about 0.6 mile off the SE point of Akhiok Island. In clear weather the reef makes a good landmark. A deep pocket of 30 fathoms is 350 yards SE of Akhiok Reef. A 4¼-fathom spot, marked on its E side by a buoy, is 0.4 mile E of Akhiok Reef.

(533) Small vessels, with local knowledge, when bound from Lazy Bay to Moser Bay pass between Akhiok Reef and Akhiok Island. Strangers are advised to keep to the E of the buoy marking the 4¼-fathom spot.

(534) **Middle Reef** covers an area about 2 miles long in the central part of Alitak Bay. The NW end of the reef area is marked by a group of black rocks that uncover about 7 feet and will usually be seen or breaking. A kelp-marked rock, which uncovers 2 feet, and a ledge, which uncovers 5½ feet, are along the E side of the reef area. The kelp-marked shoal at the S extremity is covered 2¾ fathoms. There is little if any warning of shoaling of the general depths of the bay adjacent to the reef area.

(535) **Nelson Reef**, which has a least known depth of 2½ fathoms, is 1.5 miles N of Middle Reef and 2.7 miles ESE from the entrance to Moser Bay. A thin growth of kelp is sometimes seen on this reef.

(536) **Moser Bay**, the large NW arm of Alitak Bay, has depths of 10 to 15 fathoms, soft mud bottom. It is a secure harbor and an excellent anchorage. The entrance is between **Bun Point**, low, sandy, and marked by a light, and **Amik Island**, rocky, on the S; it is obstructed by a rocky shoal that makes N from Amik Island for about 0.5 mile. The N end of the shoal is marked by a buoy.

(537) The channel between Bun Point and the N end of the rocky shoal is 175 yards wide and is close to Bun Point. It has a least depth of about 5½ fathoms, and strong tidal currents flow in the direction of the axis of the channel.

(538) About halfway between Bun Point and Fassett Point is a shoal that extends halfway across from the NE shore toward a spit on the opposite shore. The shoal has a depth of 3 fathoms at its outer end which is marked by a buoy.

(539) A gravel shoal, which uncovers, extends 400 yards ENE from the spit on the S shore opposite the shoal described above.

(540) **Fassett Point**, a low grassy head with lower land back of it, is the turning point on the NE side of Moser Bay, about 2 miles inside the entrance.

(541) **Trap Point** is the low point across the channel from Fassett Point. The Alaska Packers Association maintains a warehouse, wharf, and ways for hauling out scows here. The wharf has a face of 100 feet and a least depth of 34 feet alongside.

(542) **Snug Cove**, SW from Trap Point, shoals gradually to its head. A pass between the mountains extends from Snug Cove to the sea.

(543) **Chip Cove** is on the W side of Moser Bay, 1.5 miles N of Trap Point. The cannery pier, on the W side of the cove entrance, has depths of 20 feet alongside the working faces.

(544) Radiotelephone and radiotelegraph communications are maintained by the cannery.

(545) **Olga Narrows** connects Moser Bay with Olga Bay. It is possible to carry about 21 feet through the passage only by carefully following the narrow and crooked channel. It should not be attempted except with local knowledge.

(546) The **current** in the narrowest part of Olga Narrows attains an estimated velocity of 8 knots. During large tides there is no stage at which there is slack water the entire length of the narrows. During small tides there is said to be a period of slack water lasting from ½ to 1½ hours.

(547) **Olga Bay** is an irregularly shaped body of water 17 miles long. The W end is separated from the ocean by a strip of land 1 mile wide at a point 6 miles N of Low Cape. The shores of Olga Bay are rocky except at the W end where low grassy bluffs are from 10 to 80 feet high. On the N and S shores of the bay the land rises abruptly from 800 to 2,000 feet.

(548) The bay has the appearance of a lake and the rise and fall of the tide is only from 1 to 2 feet at the former cannery which was on the N shore about 8.5 miles above the narrows. The buildings and wharf of the former cannery now are used as a base camp for big-game guides. The wharf has depths of 7 to 11 feet alongside.

(549) Anchorage for fishing craft can be found at several places along the shores. The best anchorage is in Anchor Cove on the S side of Olga Bay, 5.5 miles above the N end of the narrows. The cannery company had dolphins here where small boats tied up over the winter.

(550) **Deadman Bay** is deep except near the head where it divides into two arms. The N arm terminates in a mudflat, while the E arm, known as Alpine Cove, affords excellent anchorage. The NW shore of Deadman Bay is fringed with numerous rocks and reefs, while the SE shore is bold and unusually clear. No settlements are along the bay, only an occasional cabin used by trappers during the winter.

(551) Between Bun Point and Fox Island are several off-lying islets and rocks and much foul ground. The shore here should not be approached closer than 1 mile except with local knowledge.

(552) **Fox Island**, about 0.5 mile off the W shore near the entrance to Deadman Bay, is bordered by bluffs and is 90 feet high. It is grass covered, comparatively flat, and a good mark in entering Deadman Bay.

(553) **Alpine Cove**, the E arm at the head of Deadman Bay, is a beautiful cove surrounded by high rugged mountains. An excellent anchorage is near the entrance in 12 to 15 fathoms, mud bottom, and sheltered from all winds and seas.

(554) From Cape Trinity, the E shore of Alitak Bay trends NNE for about 14 miles to Shag Bluff, the S entrance point of Portage Bay. This section of the coast has many visible and submerged rocks, and reefs, extending in places as much as 0.6 mile off-shore.

(555) **Portage Bay** opens into Alitak Bay from the NE. **Bert Point**, dark and rocky, 3.7 miles E of Cape Hepburn, separates the bay into two arms.

(556) **Sulua Bay**, the main or W arm, extends 3.5 miles N from Bert Point. Between **Cape Hepburn** and the W entrance point of Sulua Bay, a bank, with reefs and rocks, submerged and awash, extends as much as 0.5 mile offshore.

(557) The shores of Sulua Bay are precipitous, except at its head where a stream enters through the flats. Several short gravel spits extend from the W side, and on the two nearest the entrance are cabins used by fishermen during the season. Mooring piles are on the N side of these spits.

(558) On the E side of this arm, a bank, with depths of less than 5 fathoms, extends about 0.3 mile offshore. Two rocks, the S one of which uncovers 2 feet, are on this bank, and are about 1.7 and 2.1 miles, respectively, N of Bert Point.

(559) The E arm of Portage Bay is short and terminates in a large shoal lagoon extending 2.5 miles NE. A stream enters through the flats at the head of the lagoon.

(560) **Shag Bluff** is on the S side of Portage Bay, 2.4 miles S of Bert Point. A group of rocks, bare and awash, the highest, 10 feet, is about 1 mile W of the bluff. Between Shag Bluff and the head of the E arm, a bank covered less than 3 fathoms, extends about 0.4 mile offshore. A shoal covered 3½ fathoms, is on this bank about 0.5 mile SW of Bert Point.

(561) A good anchorage is about 0.5 mile SE of a 44-foot pinnacle rock at the head of Sulua Bay in 10 fathoms, mud bottom.

(562) **Routes, Alitak Bay.**—Coming from the W, steer **075°** for 88 miles from Foggy Cape bearing 327°, 10 miles. This will lead to a position in the middle of the entrance to Alitak Bay 3.6 miles 145° from Cape Alitak. The southernmost peak, 2,215 feet, on Kodiak Island should be about 3° on the port bow while passing Cape Alitak on the course given.

(563) If following the SW coast of Kodiak Island in approaching Alitak Bay, follow the routes given later in this chapter—Cape Karluk to Cape Alitak bearing 010°, 1.5 miles. Then steer **121°** for 2.7 miles to clear the shoal making SE from Cape Alitak. This will lead to the midentrance position 3.6 miles 145° from Cape Alitak.

(564) **To enter Lazy Bay:** (1) From Alitak Bay midentrance position given above, steer **015°** for about 5.5 miles until the S shore of Lazy Bay is abeam. Then change to **309°** until Egg Island is abeam on the starboard hand, 350 yards, then change to **284°** and enter the bay. (2) If coming from Sitkinak Strait, follow routes given earlier in this chapter, to a position 2.2 miles W from Cape Trinity. Then steer **003°** for about 8 miles until the S shore of Lazy Bay bears 287°. Then change to **309°** until Egg Island is abeam on the starboard hand, 350 yards. Then change to **284°** and enter the bay.

(565) **To enter Moser Bay:** (1) From Alitak Bay midentrance position given above, steer **034°** for 9.2 miles until Akhiok village bears 297°, 3 miles. Then change to **348°**, heading 150 yards off Bun Point. When nearly up to Bun Point change to **005°**, passing 150 yards off the highwater line at the point. When the buoy bears 237°, haul W to a **290°** course, passing about 275 yards N of the buoy.

(566) Continue on this course for 1 mile until past the buoy marking the end of the long shoal that makes out from the NE shore. Then haul to the N and anchor as desired.

(567) Strong tidal currents will be found at Bun Point setting along the axis of the channel. Large vessels should wait for slack water.

(568) (2) If coming from Sitkinak Strait, follow directions given earlier, to a position 2.2 miles W from Cape Trinity. Then steer **019°** for 11.5 miles until Akhiok village is abeam on the port hand, 2.6 miles. Then change to **348°**, heading 150 yards off Bun Point, and follow directions given above for entering Moser Bay.

(569) **To enter Deadman Bay:** From a position with the NW Middle Reefs bearing 121°, 1.5 miles, make good a **041°** course for about 4 miles until the S end of Fox Island is on the port beam, nearly 1 mile. This course leads 0.5 mile NW of Nelson Reef, a shoal with a least known depth of 2½ fathoms. When the S end of Fox Island is abeam haul to the N and steer midchannel courses up Deadman Bay, if anything favoring the SE shore.

(570) **Chart 16580.—Shelikof Strait** separates Kodiak and adjoining islands from the mainland of Alaska. The strait is reached

from the E via the passages N and S of the Barren Islands, or via Kupreanof Strait.

(571) From Barren Islands to Cape Ikolik, depths ranging from 80 fathoms in the N end to 140 fathoms in the S entrance will be found in midchannel. Along the E shore, the 100-fathom curve is from 1 to 3 miles off the various headlands. Suitable depths for temporary anchorage will be found near the shores in most places.

(572) In thick weather when not sure of the position, depths should not be shoaled less than 50 fathoms. For deep-draft vessels it is considered safer to favor the E shore.

(573) **Currents.**—The limited current data available for Shelikof Strait indicate that the flood sets into the strait from both ends.

(574) Current observations have been made for short periods at various anchorages used by surveying vessels near the shore. On the W side of the strait currents of 1 knot have been recorded, setting alongshore in either direction, with the current in the SW direction predominating. Apparently the current is less along the W coast of Afognak Island than on the opposite side of the strait.

(575) At the NE entrance to the strait in the vicinity of Dark Island and Latax Rocks, heavy tide rips, variable in position, are frequent; strong tidal currents are encountered along the coast of Shuyak Island.

(576) **Weather, Shelikof Strait Vicinity.**—NE winds invariably bring rain and thick weather, and it is from this direction that most of the heavy weather comes.

(577) SE winds generally bring clouds, but may be accompanied by either rain or fair weather.

(578) SW and W winds are invariably accompanied by fine clear weather, but they often blow with great force. The southwest gale is perhaps the most to be dreaded in Shelikof Strait, as it raises a short, heavy sea that is trying to a small vessel.

(579) S winds generally bring haze, which is sometimes so thick as to resemble fog.

(580) NW winds bring fair weather and clear atmosphere; however, in the wake of the Katmai region, the air may be hazy due to volcanic dust.

(581) During the early spring, NW gales are often accompanied with freezing weather and vessels are in danger of becoming iced down. Small craft, especially, should hug the NW shore under such conditions, so that they may seek shelter before the icing becomes serious.

(582) Gales in this region last without intermission anywhere from 1 to 3 days.

(583) NE winds are generally accompanied by a low barometer and SW winds by a high barometer, but the rule is not invariable. The barometer is of little or no value in foretelling the weather, as it accompanies rather than precedes corresponding conditions. The slope of the barometric curve is apt to change suddenly, the weather changing with equal suddenness. A sure sign of rainy weather and wind from the NE is the gathering of clouds on the NE side of the mountains.

(584) Blinding snowstorms are frequent in early spring.

(585) In May-August 1975, the NOAA Ship FAIRWEATHER, working in Shelikof Strait, reported the following weather conditions: July and August afforded the best weather and May the worst. Storms with winds to gale force occurred about twice a month. Some snow showers were experienced in May.

(586) The wind in Shelikof Strait usually blows in only two directions, either “up” (SW to NE) or “down.” The direction usually depends on whether the area S of Kodiak Island contains a

low pressure (when down the strait winds result accompanied by driving rain) or a high pressure (when up the strait winds result). Winds and seas can increase suddenly and subside just as quickly.

(587) During windy conditions, wind force is sharply higher in the vicinity of, and even in the lee of the capes and point which extend into Shelikof Strait. During these conditions, entry well into the bays is necessary for refuge. With “down” wind conditions, seas on the W side become considerably worse as one progresses NE from Kukak Bay, and with “up” wind conditions, the same applies along the W side from Cape Kuliak to the SW.

(588) Weather conditions in Shelikof Strait can also be of wide variance from one location to another at any one time. However, as a rule, weather and seas are much more amenable on the Kodiak Island side of the strait than on the mainland side.

(589) The W coasts of Shuyak and Afognak Islands trend 218°. The distance from the northernmost Latax Rocks, described earlier in this chapter, to Raspberry Cape is 48 miles. From Raspberry Cape the E coast of Shelikof Strait trends 230° for 45 miles to Cape Karluk.

(590) **Chart 16604.**—The W side of **Shuyak Island** is irregular and fringed by a chain of islets and rocks about 1 mile offshore. Between them and the island are many rocks and kelp patches. The outer ones are nearly on a line through Gull Island from Black Cape.

(591) **Shag Island**, a group of grass-covered islets, is 36 feet high and 0.9 mile W of Party Cape. A bare rock, 3 feet high, is 0.6 mile N of Shag Island. A shoal with a least depth of 4 fathoms is about 1.7 miles NW of the islets.

(592) **Wonder Bay**, SE of Shag Island, is rock strewn and should not be entered except by launches with local knowledge.

(593) **Gull Island**, 2.8 miles SW of Party Cape, has a distinctive dome-shaped top, grass covered, and 83 feet high. Several large reddish rocks are to the N of it. It marks the entrance to **Western Inlet**, which is shallow and foul. Gull Island is connected to the large island at the entrance of Western Inlet by a sandspit which bares at minus tides. This area is extremely foul.

(594) **Big Bay**, 2.5 miles S of Gull Island, is of considerable size, having a main arm branching into four smaller arms at its head. The main arm has a controlling depth of 2¼ fathoms, and although it affords protection in NE weather, it should not be attempted without local knowledge, as its entrance is obstructed by numerous rocks, many of which uncover. The smaller arms are not accessible except to very small craft.

(595) In 1971, the 231-foot NOAA Ship RAINIER anchored a number of times off the W side of Shuyak Island in about 58°33.6'N., 152°42.4'W., 1.7 miles NW of Eagle Cape, in 18 fathoms for protection from E winds. The ship reported that the anchor nearly always dragged some when dropped before setting in rocky bottom. The holding quality was fair, though on one occasion no dragging was experienced in winds of 50 knots.

(596) **Chart 16605.**—**Shuyak Strait**, between Shuyak and Afognak Islands, is not recommended as a through passage for ships because of its restricted E entrance and broken bottom in the seaward approach from the E. Its W approach in Shelikof Strait is characterized by less uneven bottom and the W entrance is mainly clear and 1.5 miles wide.

(597) Entering Shuyak Strait from Shelikof Strait, vessels pass about 1 or 1.5 miles N of Rocky Island and head for the middle of the strait on a course of about 113°.

(598) Islets and rocks, which uncover, are on both sides of the W approach to Shuyak Strait. The best water is found by favoring the N side of this approach.

(599) Shuyak Strait is apparently clear of dangers in midchannel except as noted below. Soundings indicate depths of 60 to 80 fathoms near midchannel as far E as Redfox Bay. Wooded hills, about 400 feet high, line the rocky shores on both sides, and there is practically no low flatland.

(600) **Rocky Island**, 4 miles W from Lighthouse Point, is on the S side of the W approach to Shuyak Strait. It is a bare rock 12 feet high and about 100 feet wide. Midway between Rocky Island and Lighthouse Point, but S of a line between them, is a reef bare at half tide. The reef is marked by kelp and surrounded by shoal water.

(601) The outermost danger on the N side of the W approach to Shuyak Strait is a group of submerged rocks with a least depth of 2¼ fathoms about 3 miles 052° from Rocky Island. A rock baring at minus tide is 400 yards NE of the rocky shoal, and the area inside of them to **Green Island** and thence to the shore at Neketa Bay is foul.

(602) **Neketa Bay** is a small bay E of Green Island, very shoal, with a reef extending nearly across its entrance.

(603) A rocky bank of 12 to 17 fathoms is about 1.5 miles NE of Rocky Island. In approaching the W entrance of Shuyak Strait it would be advisable to pass N of the bank.

(604) **Alligator Island**, so called from the resemblance from certain directions, is grass covered, 0.3 mile in diameter, and 64 feet high; the island is 1.3 miles S from Rocky Island. **Alligator Island Light** (58°28'28"N., 152°47'17"W.) 60 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the NW side of the island.

(605) **Cape Newland**, the SW extremity of Shuyak Island, is 75 feet high and grass covered to the tree line. Rocks awash at various stages of the tide, are detached 500 yards W and about 600 yards S from the cape. Broken bottom extends into the entrance to Shuyak Strait about one-third the way from the cape to Lighthouse Point.

(606) **Lighthouse Point**, 4.2 miles E of Alligator Island and grass covered to the tree line, is on the S side of the W entrance to Shuyak Strait. The bight just E of the point is foul. **Lighthouse Point Light** (58°28.9'N., 152°39.2'W.), 60 feet above the water, is shown from a small house with a red and white diamond-shaped daymark on the point.

(607) **Shuyak Harbor** is about 1.3 miles N of Lighthouse Point and SE of Cape Newland. Two bare rocks, 12 and 5 feet high and 100 yards apart, are in midentrance to the harbor; they are surrounded by rocks awash and are nearly connected at low water. A pinnacle rock, covered 1¼ fathoms, is E of the midentrance rocks, leaving a narrow channel between it and the E entrance point. The better channel into Shuyak Harbor is W of the midentrance rocks. The harbor has about 200 yards of swinging room. The salteries in this harbor have been abandoned and the wharves are no longer maintained.

(608) **Port Lawrence** is a bight on the N shore of Shuyak Strait, 1.5 miles from the W entrance. A small grass-covered 10-foot islet, surrounded by foul ground, is in the E part of the bight. The wharf at the abandoned herring plant is in bad condition and unusable.

(609) **Port William**, 0.5 mile E of Port Lawrence, is 0.3 mile wide and 0.5 mile long. The wharf of a former cannery is in disrepair.

(610) Rocks awash are about 250 yards offshore between Port Lawrence and Port William. Nearby and closer inshore is a rock about 10 feet high.

(611) **Redfox Bay**, the largest indentation on the S side of Shuyak Strait, has general depths of less than 20 fathoms, mud bottom, and affords excellent anchorage in any weather.

(612) An islet, 158 feet high, and wooded on its S half, is in the middle of the entrance. W of the islet, about 100 yards off the W shore of the bay, is a rock awash. Freight steamers use the channel between these rocks and the islet, which is about 200 yards wide and clear, and anchor just S of the islet to discharge cargo to boats and barges; swinging room of about 700 yards is available here.

(613) A rock awash, unmarked by kelp, is off the entrance to a small cove on the E shore of the bay 0.8 mile S from the entrance islet.

(614) **Tide**.—The diurnal range of tide in Redfox Bay is 13.7 feet.

(615) The bay, about 1 mile E of Redfox Bay, is foul in places and has an irregular bottom.

(616) **Daylight Harbor** is 0.5 mile SE of Port William. The herring plant here has been abandoned, and the wharf is in ruins. From this harbor to **Cape Current**, about 3 miles, there are no important indentations.

(617) A dangerous patch of small rocky heads with a least depth of $3\frac{1}{4}$ fathoms is in about the middle of the strait 2.3 miles from its E end. This danger is abreast of two small islets, the W one is about 100 yards in diameter, partly grass covered and wooded. The kelp marking this spot usually is drawn under by the current.

(618) **Cape Current Narrows**, about 1 mile long, forms the E end of Shuyak Strait. Rocky obstructions in the narrows near the E end greatly reduce the width of the channels on either side of them.

(619) The Shuyak Island shore of the narrows is abrupt, wooded, and about 500 feet high. The Afognak side is grass covered for about 200 feet back from the shore and about 50 feet high with level top and abrupt shore.

(620) In the middle of the W part of the narrows, general depths are about $8\frac{1}{2}$ fathoms or more. In the E part of the narrows, broken ground with numerous rocks awash extends almost completely across from Cape Current to Shuyak Island. Two narrow channels lead through the broken ground, one about 450 yards NW of Cape Current, and the other about 75 yards off the S shore of Shuyak Island. The former channel has a least found depth of $4\frac{1}{2}$ fathoms; the latter channel has a least found depth of $5\frac{1}{2}$ fathoms. Mariners are advised to seek local knowledge before attempting to make passage through Cape Current Narrows.

(621) The **tidal currents** at Cape Current Narrows are strong, and bad tide rips are frequent. Current predictions may be obtained from the Tidal Current Tables.

(622) A large kelp patch is NE of the E entrance to the narrows just S of Big Fort Island.

(623) **Bluefox Bay**, indenting the shore of Afognak Island SW from Lighthouse Point, has an entrance about 2 miles wide.

(624) **Teck Island**, **Hogg Island**, and **Bear Island** are the three principal islands overspreading the entrance and the area inside of Bluefox Bay. The buildings of an abandoned herring reduction

plant, now used as family dwellings and for the storage of fishing gear, are on the S side of Hogg Island.

(625) Three channels lead into Bluefox Bay. The W channel has been used by small craft, but it is foul and is not recommended.

(626) The E channel is the one in general use, but it also has several dangers and should be navigated with caution. A $4\frac{1}{4}$ -fathom spot is in midchannel about 200 yards off the middle of the E side of Hogg Island. A rock with a least depth of $1\frac{1}{2}$ fathoms is 375 yards E from the SE point of Bear Island. A rock awash is about 0.5 mile S from the same point. At this rock the tangents of Hogg and Bear Islands are nearly in range. A rock with $2\frac{1}{4}$ fathoms over it is 200 yards off the SE side of the small island just S of Bear Island.

(627) To enter Bluefox Bay, vessels are reported to hold the course into Shuyak Strait until the E channel opens; then to change course to about 177° and proceed through the E entrance in midchannel, heading for a wooded point on the E side of the bay near its head, but favoring the W side of the channel near the $4\frac{1}{4}$ -fathom spot mentioned above. Navigation beyond Bear Island is difficult, and the chart should be followed closely.

(628) **Chart 16604**.—The W coast of Afognak Island from Shuyak Strait to Black Cape is irregular, rocky, and wooded to an elevation of about 700 feet. Some grass appears on the points. The small island about halfway between Black Cape and Alligator Island is about 0.3 mile in diameter, 48 feet high, and covered with grass. Inside a line from Black Cape to Alligator Island the water is generally foul with numerous rocks and islets.

(629) **Devil Inlet**, 3 miles NE from Black Cape, has wooded shores. About 0.3 mile inside the entrance, rapids run heavily except for short periods of nearly slack water preceding and following high tide. The inlet level inside the rapids is about 11 to 12 feet above low water. Vessels drawing 3 feet or less may enter about $2\frac{1}{2}$ hours before high tide. Numerous rocks exist in the channel and caution is required in making the passage. The preferred time to navigate this passage is during the slack before ebb which occurs about 2 hours after high water. Both slack water periods last for about 5 minutes. Within the inlet, shoal areas exist off the inshore points of the two islands about 1 mile S of the entrance. Passage must be made to the W of the northernmost island, thence SE between the islands leading to the S portion of the inlet where depths in excess of 20 fathoms exist. The entrance outside the rapids is a good anchorage in heavy weather for small craft.

(630) **Black Cape** is low and grassy at the end, and rises gradually in a narrow heavily wooded ridge to a prominent bald knob, 1,151 feet high. Bare and submerged rocks extend a short distance off the cape, and a reef, mostly showing above water, is on its S side. A fair anchorage protected from SE weather can be found 1.2 miles NE of the cape in 17 fathoms, rocky bottom.

(631) **Foul Bay**, between Black Cape and Ban Island, is about 4 miles wide at its entrance. The bay extends E about 4 miles where it divides into a N arm extending E for about 2.5 miles and a S arm extending S for about 4 miles. The bay was surveyed in 1973, and depths in excess of 10 fathoms were found throughout most of the bay. Vessels wishing to enter Foul Bay are advised to parallel the Ban Island shore about 0.4 mile off, passing S of the island 1 mile E of the N point of Ban Island. The 231-foot NOAA Ship RAINIER used this passage to enter and anchor about 0.5 mile off the point dividing the bay into N and S arms. The bottom throughout the bay is broken with numerous rocky areas, and

several attempts at anchoring may be necessary in any given area before finding soft bottom. Small craft may find shelter in the numerous coves within the bay. The SE arm of Foul Bay leads to an extension of Paramanof Bay and may be navigated by small vessels steering midchannel courses.

(632) **Ban Island**, separating Foul Bay from Paramanof Bay, is mountainous with steep slopes on all but the E end. The island is about 6 miles long in an E–W direction, and about 1.8 miles wide in a N–S direction. Kelp is close to its W end.

(633) **Paramanof Bay**, between Ban Island and Cape Paramanof, was surveyed in 1973 and found to be deep and nearly clear of hazards. In the outer bay, it is recommended to favor the Ban Island side when entering. Care must be taken to avoid two rocks which are about 4.5 miles E of Cape Paramanof. The westernmost rock is bare and is 0.3 mile 025° from a rocky islet close to the S shore of the bay. A submerged rock, covered about 5 feet, is 0.5 mile 065° from the same rocky islet.

(634) An excellent anchorage is in the cove on the S side of the bay about 5 miles E of Cape Paramanof. Vessels should pass N of the rocks mentioned above, thence steer a S course to the center of the cove where good protection is afforded from all but strong NW winds. Holding ground is good in 20 fathoms, soft bottom, with ample swinging room. Smaller vessels may anchor closer in. The long straight inlet leading S from this cove can be entered by small craft at one-half tide or higher.

(635) The E end of Paramanof Bay narrows to a pass with a small wooded island in the center. Passage S of this island provides the best water with a minimum of 4½ fathoms at midchannel. Current measurements just W of the island indicate the existence of weak tidal currents, less than 1 knot. The two bays extending SE from Ban Island are clear of hazards and gradually shoal towards the streams at the head of each bay.

(636) The lower levels of Afognak Island in general are wooded with the exception of the E coast and the SW end S of Paramanof Bay.

(637) **Cape Paramanof** is the NW end of the peninsula included between Paramanof and Malina Bays. It is a low tongue of land projecting 0.5 mile N from the mountains. A reef is on the N side of the cape inside Paramanof Bay, and a part of it, about 0.5 mile from shore, is awash.

(638) The peninsula between Paramanof and Malina Bays is marked by two mountain ridges trending E, with a small stream in the valley between. The land is grass covered, with bare rocks in places, and has no timber. The N ridge rises in steep, grassy slopes to 1,830 feet, with a saddle behind it and then extends E with about the same height. **Tanaak Cape** is the N point at the entrance of Malina Bay.

(639) **Charts 16576, 16594, 16597.**—**Malina Bay**, indenting the W coast of Afognak Island, is between the mountainous peninsulas terminating in Tanaak and Steep Capes. It is about 10 miles long and is a secure harbor. Water can be obtained from numerous small streams. Some timber is found near the head of the bay and in some of the valleys. Steep Cape and the high cliff at the S point at the entrance and a prominent slide about 1 mile SE of Tanaak Cape on the N side of the bay mark the entrance.

(640) The bay, 2.5 to 3 miles wide for nearly 4 miles, narrows to a neck about 1.5 miles long with a least width of 0.4 mile, and then separates into two arms. The S arm, known as Malka Bay, extends from the S side of the neck 1.5 miles SE. The E arm is about 800 yards wide near its entrance; it then opens out, forming

a basin about 2 miles long and about 1.2 miles wide. A shallow arm, about 0.2 mile wide, extends 2 miles E from the E end of the basin.

(641) The outer part of the bay is clear, with the exception of a rock awash 0.2 mile from shore in the bight on the S side about 4 miles inside the entrance. Rocks awash extend 300 yards off the S side at the entrance to the neck, and 0.5 mile W of the island in the entrance of Malka Bay. The depths are suitable for anchorage 0.3 to 0.4 mile from shore nearly anywhere in the bay. Holding is good in 12 to 18 fathoms, sloping bottom, along both shores about 1 mile inside the entrance. An anchorage with fair holding is available on the N side of its E end, about 0.3 mile W of a rocky islet, and the same distance from the shore NE, in 15 fathoms. This anchorage is exposed to W weather, and NE winds sometimes blow with considerable force.

(642) In the neck off the entrance of Malka Bay is an island 0.4 mile long and 115 feet high, with a clump of trees near its middle. There is no safe passage between it and the shore SE. An islet 30 feet high is on the S side of the neck 0.4 mile E of the island, and foul ground extends 225 yards from the S shore just E of the islet. A rock, 15 feet high, with a small one close W, is 400 yards NE of the islet. The best channel is between the 30-foot islet and the 15-foot rock. A rock awash is 400 yards E of the 15-foot rock and over 300 yards from the N shore.

(643) To pass through the neck, pass 200 yards N of the island, steer **121°**, and pass 100 yards S of the 15-foot rock, in the middle of the neck.

(644) The basin has depths of 30 to 47 fathoms in its W half and shoals gradually E, affording secure anchorage. A rock covered at high water is 400 yards W from the N point at the entrance to the narrow arm extending E, and a shoal extends 600 yards SW from a point on the N shore 0.4 mile N of the rock. The best anchorage is about 0.4 mile off the bight at the N end of the basin, with the entrance (neck) just closed, in 15 to 18 fathoms, sticky bottom.

(645) **Malka Bay** is a secure anchorage with a clear width of 0.2 mile. The NW point of the island in the entrance should be given a berth of over 100 yards; a rock awash is 100 yards from the shore SW of the same point.

(646) To enter Malka Bay, steer **163°**, pass 150 yards S of the NW point of the island, and follow the SW shore of the arm at a distance of about 250 yards. Anchor in the broad part about 0.6 mile from the head, in about 10 fathoms, sticky bottom. A flat extends nearly 0.4 mile from the head.

(647) High and low water in Malina Bay occur about 10 minutes earlier than at Seldovia. The diurnal range of the tide is 14.5 feet.

(648) **Raspberry Strait**, between Raspberry Island and Afognak Island, is about 16 miles long, uniformly narrow, and about 1 mile wide from Shelikof Strait, at its NW end, to Afognak Strait at its SE end.

(649) The approach to the NW entrance is clear of dangers, no known shoals or detached rocks are more than 100 yards offshore. The Shelikof Strait sides of Raspberry Island and Afognak Island are rugged with barren cliffs and bluffs except where valleys make into the interior of the islands.

(650) The SE end of Raspberry Strait ends in two passes which lead into Afognak Strait around Little Raspberry Island. Both passes are dry at from 2 to 3 feet above low water, and numerous reefs border the shores of Raspberry Island in this vicinity and of Little Raspberry Island. However, the NE pass is used at high wa-

ter by local boats drawing less than 8 feet. Neither of these is recommended without local knowledge.

(651) **Steep Cape**, also known as **Twin Heads**, about 2.5 miles N of the NW entrance to Raspberry Strait, is the most prominent headland between Malina Bay and the strait. Its bare, gray rocky sides rise abruptly from the water's edge to its twin summits, 1,535 and 1,562 feet high. A light-colored rockslide is quite noticeable. A prominent 78-foot-high pinnacle rock is about 100 yards offshore; it is indistinguishable when seen against the cape.

(652) Between Steep Cape and the entrance to the strait is a bight with a gravel beach at the foot of a valley blocked by a bluff of glacial moraine about 250 feet high. The shore between the cape and this bight consists of a steep gravel bluff, 213 feet high, grass covered at the top, and giving the appearance of a tableland. The bluff is in the form of a point from which shoals extend for 0.5 mile offshore.

(653) The rounding point of the headland on the SW side of the entrance to Raspberry Strait when seen from the SW is somewhat similar to Steep Cape. However, its cliffs and rockslides are covered with grassy patches and do not have the general gray appearance which makes Steep Cape more prominent. The summit of this headland is 1,996 feet high and the slopes are steep. A pinnacle rock, 25 feet high off the SW shore, makes a good landmark when not seen against the foot of the headland. Between this headland and Raspberry Cape are bights from which low valleys lead into the interior of Raspberry Island. The shores of these bights are gravel and the valleys are easily distinguished from offshore.

(654) **Anchorage**.—Since Raspberry Strait itself is not wide, small vessels may anchor along the shores throughout the strait where depths appear suitable, depending upon the protection required. The following anchorages are recommended for deep-draft vessels:

(655) On the NW shore of Raspberry Island in Shelikof Strait are two bights, with gravel beaches, about 3 and 5 miles SW of the entrance to Raspberry Strait. At the head of these bights deep valleys extend inland. Anchorage may be had in 10 to 15 fathoms, sand bottom, with good protection from E storms but exposed to the W. The NE of these two bights is clear; the SW bight is foul, and coming in from the N vessels should keep at least 800 yards offshore.

(656) N of the entrance to Raspberry Strait and S of Steep Cape is a small bight with suitable protection from E storms and where anchorage may be had in 10 to 15 fathoms, sand and gravel bottom. The shore of this bight is a gravel beach just N of which are low grass-covered hills of glacial gravel.

(657) About 1.5 miles NW of Dolphin Point, vessels may anchor off the NE shore of the strait, in 12 to 15 fathoms, sand bottom, with good protection from E storms about 400 to 500 yards offshore.

(658) Fair anchorage for deep-draft vessels is 0.9 mile about 210° from Dolphin Point Light 3, in 12 to 15 fathoms, mud bottom.

(659) The best anchorage in the strait for large vessels with protection from E storms is 2 miles SE of the mouth of Muskomee Bay and 600 yards off the NE shore. A prominent white cabin, which bears between 250° and 270°, is at the Port Vita Cannery ruins. Depths are 12 to 18 fathoms, sticky bottom.

(660) Another possible anchorage is located in deeper water, in midstrait off Selief Bay in about 18 fathoms, sand bottom.

(661) Anchorage for small vessels with good protection in any weather may be found in Selief Bay.

(662) **Dangers**.—There are no off-lying dangers or shoals at the NW approach and entrance to Raspberry Strait. From the entrance of the strait to Selief Bay, the only dangers are inside 300 yards of the strait shore except for a shoal of 3½ fathoms about in midstrait, 0.75 mile 124° from Dolphin Point Light 3. This shoal is passed to the N as broken bottom is between the shoal and the gravel point on the S side of the strait.

(663) From Selief Bay to the SE end of the strait are numerous shoals and dangers, and local knowledge is required even by small boats. Deep-draft vessels should not proceed beyond the entrance to Selief Bay. Between this bay and The Narrows, are four rocky shoals well offshore; one of these has a least depth of 11 feet and is in midchannel about 0.4 mile N of Tiger Cape. From this cape SE to The Narrows, sandspits make well out into the strait from many of the points.

(664) **Routes**.—The NW entrance to Raspberry Strait may be approached from any direction by keeping 1 mile offshore. Come into the middle of the entrance off Raspberry Strait Light 1 and steer a course **138°** for about 4 miles until Dolphin Point Light 3 is abeam about 700 yards. Thence steer **090°** for about 1.5 miles until abeam the end of a low gravel point. Pass this gravel point about 0.4 mile and change course to **120°**. Hold this course for about 1 mile and when the abandoned Iron Creek Cannery comes abeam, follow the middle of the strait on a course **151°**.

(665) Approaching The Narrows at the SE end of Raspberry Strait from Kupreanof Strait set a course **007°** with the E end of Little Raspberry Island ahead. Approaching from the E, that is from Afognak Strait, set a course **270°** with the S tangent of Little Raspberry Island ahead, and pass 500 yards S of the foul ground S of Shoal Point. Give the E tip of Little Raspberry Island a berth of 400 yards as reefs make out 200 yards off the high-water line. Enter the pass favoring the N side and pass about 100 yards off Nochlega Point and the next point which is adjacent. These two points form a double point with a short gravel beach between them. The Narrows uncovers several feet and is not recommended to vessels without local knowledge. This pass can be negotiated at high water springs by vessels up to 8-foot draft with extreme caution.

(666) **Tides and currents**.—At Dolphin Point the diurnal range of tide is 14.0 feet. The tide at Tiger Cape is 5 minutes later than at Dolphin Point and the ranges are about 0.5 foot more. (See Tide Tables.)

(667) Tidal currents in Raspberry Strait are weak, except at The Slough and The Narrows where the range at the N end is greater than the range at the S end as a result of which it is estimated that from approximately midtide to high tide and vice versa, the current flows from Raspberry Strait into Afognak Strait. This current probably amounts to from 2 to 3 knots during spring tides. At approximately midtide the tidal level at the two ends of The Narrows is equalized and as the tide falls below midtide the current reverses and flows from SE to NW until the pass goes dry at 2.5 feet above low water.

(668) **Weather, Raspberry Strait and vicinity**.—SW winds prevail from June to September. This prevailing wind is attended by good weather, mostly clear skies with little rain. These winds, however, often blow with such force as to build up heavy seas in Shelikof Strait, uncomfortable for all except full-powered vessels. The storms with E winds come with a frequency of one or two per month from June to October. During the summer, July is

the worst month as the prevailing wind seems to be E attended by much rain although there are no severe E storms.

(669) **Raspberry Strait Light** (58°09.6'N., 153°13.3'W.), 50 feet above the water, is shown from a small house with a red and white diamond-shaped daymark on a small grass-covered island off **Cape Nuniliak** on the NE side of the entrance. This island blends with the shore and it is difficult to pick up except when approaching from the N. Inside the strait, about 1 mile SE from Raspberry Strait Light on the NE side is a prominent light-gray rocky bluff, which rises from the water's edge 150 to 200 feet high.

(670) Both shores of Raspberry Strait, from the NW entrance for about 7 miles, consist of rock ledges and numerous short gravel beaches between small rocky points. The shores rise steeply to the mountains except where valleys intervene. Close along the SW shore about 1 mile inside the entrance are a number of off-lying pinnacle rocks, 5 to 41 feet high.

(671) **Dolphin Point** when approached from Shelikof Strait, appears as a long grass- and tree-covered point with several low hills or knobs between it and the foot of the steep slope inland.

(672) **Muskomee Bay**, receding 1.5 miles, is about 3 miles E of Dolphin Point on the E side of the strait. This bay is not suitable as an anchorage for large vessels, and it offers little protection for smaller vessels as E and W winds draw through the deep valleys at the head of the bay. Along its shores are outcropping ledges and a few gravel beaches. The bottom near the head is rocky. At the S side of the entrance, 200 yards off the shore, is a reef which uncovers 7½ feet. Off the N shore at the entrance to the bay are three rocky shoals with least depths of 6 to 20 feet. The head of the bay is foul except around the N side of an island in the head of the bay.

(673) From Muskomee Bay, the shores of the SE part of the strait consist of boulder and gravel beaches, and several low, grass-covered shale or gravel points. The terrain back of these shores is not as steep as in the NW part of the strait and is timbered from Dolphin Point. The points extend from 200 to 300 yards and have shoals or outcropping ledges extending into the strait another 100 yards or more. One of these is on the NW side of the strait about opposite Selief Bay.

(674) **Selief Bay** is on the SW side of the strait about 6 miles SE of Dolphin Point. The outer part of the small peninsula on the E side of the entrance to Selief Bay is a grass-covered glacial hill 93 feet high, serrated at the top and the most prominent landmark SE of Dolphin Point. This bay offers good protection and anchorage for small vessels in any weather, particularly from SE or E storms. The entrance to the bay is shoal with a bottom formation similar to a bar and with a least depth of 8 feet. Inside the bay the best anchorage is with the end of the point at the E side of the entrance bearing about N and in 1½ to 3 fathoms. The bottom is mud and the W side is shoal.

(675) **Tiger Cape**, about 2 miles SE of Selief Bay on the same side of the strait, is a low grass-covered shale point with several abandoned houses near the foot. More abandoned buildings of a former sawmill are about 0.25 mile farther to the SE.

(676) The two islands opposite Tiger Cape and about 2 miles E of the entrance to Selief Bay are also prominent. The crests of these islands are wooded and the westernmost is 100 feet high, the other 160 feet.

(677) No other landmarks are between Tiger Cape and the S end of Raspberry Strait.

(678) On the opposite side of the strait N of Tiger Cape is **Yukuk Bay**, a shallow bay, about 1 mile wide in a NW and SE direction, locally known as **Cottonwood Bay**. This bay shoals to 1 fathom about 300 yards inside the general trend of the NE shore of the strait. Throughout the bay the depth varies from 2 to 8 feet. A long gravel and rocky spit making into the bay from the N point at the entrance uncovers. Favor the opposite side in entering.

(679) Another bay, locally known as **Waskanareska Bay**, is E of Tiger Cape and on the SE side of a gravel spit which separates it from Yukuk Bay. Depths vary from 3 to 6 feet. The inner part of the bay and the part along the NE shore for 200 yards offshore uncovers. The E half of the entrance is foul and uncovers.

(680) Through **The Narrows**, which is the pass on the NE side of **Little Raspberry Island**, and the approaches in Afognak Strait, the shores are mostly rock ledges with many off-lying dangers, some of which are dangerous to small craft.

(681) Rocks and shoals too numerous to mention are in the passes among Deranof Island, Little Raspberry Island, and Raspberry Island. The pass on the W side of Little Raspberry Island is **The Slough**. These passes are used only by small vessels with local knowledge, and at high tide only.

(682) The W side of Raspberry Island is mountainous and grass covered, the principal points are three high cliffs, between which are two deep valleys trending E. The S valley, about the middle of the island, is especially low and extends through to Onion Bay. The S side of Raspberry Island and Kupreanof Strait have been described earlier in this chapter.

(683) **Viekoda Bay** is on the E side of Shelikof Strait between Outlet Cape and Uganik Island. It extends ESE about 15 miles into Kodiak Island to a narrow head. Uganik East Passage enters Viekoda Bay on the S side about 7 miles inside the entrance. Good anchorage for moderate sized vessels in 12 to 17 fathoms may be had 0.5 to 1 mile NW from the islands 1.5 miles from the head of Viekoda Bay.

(684) Off the entrance, about 3 miles from Outlet Cape, is a bank on which the least depth found is 6¾ fathoms.

(685) A narrow point, its end detached, extends 0.4 mile from Uganik Island 1 mile E from its N end. Broken ground, with depths of 4 and 5 fathoms, extends 0.6 mile N from the point. A fair anchorage in S weather is in the bight on the E side of the point, 0.3 to 0.4 mile from shore, in 10 to 15 fathoms.

(686) A rock covered 4¾ fathoms, which should be avoided, is 0.6 mile from Uganik Island and 2.5 miles NW of **Naugolka Point**.

(687) This point has an islet near it, and a rock that uncovers, is 0.8 mile E of the islet and 0.4 mile from the S shore of Viekoda Bay. Depths of 3 to 5 fathoms extend 0.3 mile N of the rock.

(688) **Uganik Passage** and **Uganik East Passage** border the S and E sides, respectively, of **Uganik Island**, and connect Viekoda and Uganik Bays.

(689) That part of Uganik East Passage on the NE side of Uganik Island is clear of dangers in midchannel except for a flat that extends about 600 yards from the E shore, about 5 miles SSE of Naugolka Point, leaving a channel 350 yards wide. An islet is close to Uganik Island in the bight about 0.2 mile SW of the flat.

(690) **Terror Bay** extends several miles S from the turn of Uganik East Passage at the SE end of Uganik Island. The main part of the bay is clear with the exception of three rocks about 300 yards from the W shore, as indicated on the chart. Secure anchorage for vessels of any size is 3 miles above the entrance and about 2.5 miles from the head of the bay, in 7 to 15 fathoms.

(691) The part of Uganik Passage S of Uganik Island is 9 miles long from the SE end of Uganik Island to East Point, where it joins Uganik Bay.

(692) A rock that uncovers, is 0.3 mile from the S side of Uganik Island and 0.7 mile from its SE end. A 5-fathom spot is reported 500 yards SE of this rock.

(693) A peninsula, 500 feet high, extends S from Uganik Island 2 miles from its SE end and narrows the passage to 0.2 mile. From the point on the S shore SE of the peninsula, **a ledge, which uncovers, makes out nearly half way across the narrowest part of the passage.** Vessels should favor the SE end of the peninsula in this part of the passage.

(694) An island is in the middle of the passage W of the peninsula. Several rocks, submerged and bare at various stages of the tide, are in the vicinity and W of the island. The more prominent of these dangers are: a rock that uncovers, about 100 yards NE; a bare rock 0.3 mile NW, and a rock that uncovers, 250 yards N of it.

(695) Vessels from E may pass N of the foul ground, and clear these dangers, by following the SW shore of the peninsula at a distance of 200 yards, taking care to avoid a rock awash that is 350 yards offshore, until the island is abaft the port beam, and then steer **300°** for the southernmost point of Uganik Island which shows ahead with the summit of a peninsula a little on the port quarter.

(696) Foul ground and rocks awash extend 0.3 mile from Uganik Island 0.4 to 0.9 mile NW of the peninsula.

(697) The channel S of the island is narrower than that N. To go through this channel from E, bring the S end of the peninsula barely open from the point E, astern; and steer for the prominent point on the S shore 0.8 mile W of the island, course **281°**. Keep close on this line, passing midway between the island and an islet near the S shore 0.3 mile SW of the island. When the islet is passed, haul N and give the point a berth of over 200 yards. The principal dangers are: A rock that uncovers, 200 yards SE of the island; a rock with 8 feet over it 0.4 mile W of the island and 0.3 mile N of the islet. The islet should be given a berth of over 100 yards.

(698) W of these dangers Uganik Passage is broad and free from outlying dangers. In the large bight of Uganik Island 5 miles E of East Point, shoals extend 0.5 mile from the N shore for 1 mile from its head. From this bight a broad, low divide extends across the island.

(699) Anchorage in 12 fathoms, good holding ground, and good protection from all except W weather, can be found 0.45 mile off the N shore of the passage in 57°50.7'N., 153°21.8'W.

(700) Rocks that uncover, extend 0.5 mile from the S shore of the passage 1.8 miles E of East Point, and 0.5 mile farther E rocks make out 600 yards on the NW side of a point on the S shore.

(701) **Charts 16576, 16597.**—**Uganik Bay** is on the E side of Shelikof Strait between Cape Uganik and Miners Point. In general the bay and its arms, with exception of East Arm, have depths too great for anchoring. Several small shoal spots rise abruptly from the general level of the bottom. One of these is in midchannel about 1 mile NW from Mink Point at the junction of East and South Arms, and two others are in the passage between Sally Island and the shore at Starr Point. The shores of Uganik Bay rise abruptly from cliffs in places and are generally covered with grass and alder bushes.

(702) **Pilotage, Uganik Bay.**—Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See Pilotage, chapter 3, for details.)

(703) The Kodiak Island area is served by the Alaska Marine Pilots and Southwest Alaska Pilots Association.

(704) Vessels using Southwest Alaska Pilots Association pilots and en route to Uganik Bay can meet the pilot boat about 1.5 miles W of East Point (57°50.5'N., 153°28.3'W.).

(705) The pilot boat can be contacted by calling "UGANIK BAY PILOT BOAT" on VHF-FM channel 16 (156.80 MHz) or on a prearranged frequency between pilot and agent/vessel.

(706) **Cape Uganik**, the NW end of Uganik Island, is low and flat for about 0.3 mile back and then rises 1,200 to 1,500 feet. Foul ground extends 1.5 miles S from the cape and 0.3 mile or more offshore. Vessels should give the cape a berth of 1 mile.

(707) **Noisy Islands**, a group of two, are 0.5 and 0.6 mile from Uganik Island and 2.5 miles SW from Cape Uganik. The N island is rolling with round-topped, grass-covered hills, the highest of which is about 192 feet. **Noisy Islands Light** (57°55.9'N., 153°33.8'W.), 80 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the W bluff of the N island. The S island is also grass-covered, but is low and flat. Two fine sand beaches are near the N end of this island and a house is nearby. When off Uganik Bay, these islands are sometimes hard to pick up as they merge into the brown hills of Uganik Island. Noisy Islands should be given a berth of 1 mile.

(708) **Noisy Passage**, between Noisy Islands and Uganik Island, appears to be clear in midchannel with a least known depth of 7 fathoms. It is in constant use by small coasting vessels but it is not recommended for deep-draft vessels. Vessels using this channel should avoid the rock awash, about 0.2 mile N of the N Noisy Islands.

(709) **Miners Point**, 8 miles SW from Cape Uganik, is distinctive in appearance as it terminates in three moundlike hills, the inner one is 390 feet high, and the outer one about 188 feet high.

(710) **Broken Point**, about 3.5 miles ESE of Miners Point, is low and flat for 0.4 mile back and then rises to the highland back of it. The outer end of the point is detached and appears as if it had been broken off. A reef, which uncovers on a 2-foot minus tide, is about 250 yards off the point. The point should be given a berth of 0.8 mile.

(711) Anchorage in 12 to 18 fathoms, fair holding ground and protected from S wind, can be found about 1 mile W of Broken Point in 57°53.4'N., 153°39.0'W.

(712) A stream enters the bay in the bight 1.6 miles S from Broken Point. Good anchorage sheltered from S to W winds is off the mouth of the stream in 8 to 15 fathoms.

(713) **West Point** is a comparatively low rocky cliff that rises rapidly to the highland behind it.

(714) **East Point**, 5 miles SE from Broken Point, is the NW extremity of the peninsula separating Uganik Bay and Uganik Passage. Two flat rocks with bluff sides are close to the point and from the point is a long gentle slope to the high land.

(715) **Northeast Arm**, the first and largest arm in Uganik Bay, is about 3.3 miles S of East Point. **Northeast Arm Light 1** (57°47.1'N., 153°27.2'W.), 58 feet above the water, is shown from a small house with a square green daymark, and marks the N entrance point to this arm.

(716) **Rock Point**, the S entrance point, has several bare rocks which extend 250 yards N.

(717) **Starr Point** is the low rounding point on the NE side of Northeast Arm where the channel is split by Sally Island. **Starr Point Light 3** (57°45.3'N., 153°22.1'W.), 30 feet above the water, is shown from a skeleton tower with a square green daymark on a rock just off the point. The rock is awash at extreme high tide and attached to the shore at low tide.

(718) **Sally Island**, just 2 miles long, occupies a central position in the basin at the head of Northeast Arm. The 1,000-foot-high island is covered by grass and alder bushes.

(719) **Sheep Island** is a small island just off the SE point of Sally Island and is connected to it by a gravel spit which is covered at high water.

(720) A cannery is about 1.3 miles ESE of Starr Point. The wharf at the cannery has a face 110 feet long, with a least depth alongside of about 30 feet. In approaching this wharf care should be taken to avoid the spit which bares, 150 yards off a small stream 0.3 mile W from the wharf. Deep water extends close up to the spit.

(721) The cannery at **Port O'Brien**, 2.2 miles SE of Starr Point, has a wharf 390 feet long with a 105-foot face, and a depth of about 32 feet alongside. The oil wharf parallel to this main wharf is of equal length with a 30-foot face, and has a depth of about 20 feet alongside. Both canneries store fuel oil, diesel oil, and gasoline for their own use, and have an abundant supply of water. They have some machine shop facilities and scow ways. Tides of 16.5 feet are necessary to use these ways. There are no marine railways. The cannery at Port O'Brien maintains radiotelephone and radiotelegraph communications.

(722) Deep water surrounds Sally and Sheep Islands except for the narrow passage between Sheep Island and the mainland, where it is nearly bare.

(723) A shoal with a least depth of 5¼ fathoms, sand and gravel bottom, is about 300 yards N from the N tip of Sally Island.

(724) Anchorage may be had off either cannery in about 30 fathoms.

(725) **Village Islands** are numerous islands and rocks 2 to 3.5 miles S from West Point. A cannery back of the islands maintains radiotelephone and radiotelegraph communications. An abandoned native village is in the cove just S of the islands. Anchorage for small craft may be had in 6 to 12 fathoms, but the approach is over broken ground making it safe for launches only. There are apparently no continuous channels between the various rocks and islands.

(726) **East Arm** extends SE from Uganik Bay 7 miles S from East Point. It is 1 mile wide at the entrance and over 3 miles long, but a flat extends 1.5 miles from its head or 0.3 mile below the unnamed island on the right on the S side of the arm. Depths range from 15 fathoms at the entrance to 3 fathoms near the flats. A rock 450 yards NW from the island near the S shore uncovers 2 feet. Between this rock and the shore is another rock that uncovers. A row of four rocks, covered about 2 feet, is reported near the W shore about 0.4 mile SE of Mink Point and to extend S about 0.2 mile to the beach. A saltery is on the S shore W of the unnamed island. It has a small wharf that bares at low water. In approaching the saltery care should be taken to avoid the rocks mentioned above.

(727) East Arm affords an excellent anchorage for vessels of any size in 10 to 15 fathoms, sticky mud bottom. It is subject to heavy williwaws during S gales.

(728) **South Arm** extends 5.5 miles S from **Mink Point**, the S entrance point to East Arm. The arm near its head is only 0.2 mile

wide. A rock, covered ½ fathom, is 225 yards off the E shore, 0.6 mile S of Mink Point. Between the point and the submerged rock is a rock which uncovers 2 feet, 200 yards offshore. Anchorage may be had near the head in 16 fathoms, sticky mud bottom, where the arm is 0.7 mile wide.

(729) **Routes, Uganik Bay.**—From N, round Cape Uganik 1 mile and steer 222° for 3.5 miles to a position 1 mile off of Noisy Islands. Round the islands 1 mile and steer 158° for about 6 miles to a position midway between East and West Points.

(730) From S, give Cape Ugat and Miners Point a berth of 1.5 miles and Broken Point a berth of 0.8 mile. Then steer 143° for 4 miles to a point midway between East and West Points.

(731) **To enter Northeast Arm.**—From a position midway between East and West Points steer 163° for 2.3 miles until the N tangent of the largest and most N of the Village Islands is on the starboard beam. Then change to 133° for 1.8 miles until Northeast Arm Light 1 is on the port beam, about 0.5 mile. Then change to 101° for 1.6 miles; thence change to 132°, heading about 0.2 mile off Starr Point. Round Starr Point 0.2 mile or less and continue in midchannel along the E side of Sally Island to anchorage or wharf.

(732) **To enter South Arm.**—From a position midway between East and West Points, steer 163° for 2.3 miles until the N tangent of the largest and most N of the Village Islands is on the starboard beam. Then change to 190°, heading 0.4 mile off Mink Point which separates East and South Arms. From midchannel off Mink Point, steer midchannel courses taking care to avoid the rocks which are as much as 225 yards offshore for 0.8 mile S from Mink Point.

(733) **To enter East Arm.**—Follow courses as above until off East Arm and then enter on a midchannel course taking up anchorage as desired.

(734) **Cape Ugat**, on the E shore of Shelikof Strait 12 miles SW from Cape Uganik, is a high ridge sloping to a low rocky cliff at the point of the cape. A short distance off the cape is a small, rocky, grass-covered islet 104 feet high that can be seen for 15 miles up and down the coast on a clear day. A reef that uncovers about 5 feet is about 175 yards W of the islet. Between the islet and the cape is a channel used by the local cannery tenders. **Little River** is a meandering stream that enters the strait a short distance S of Cape Ugat.

(735) **Cape Kuliuk**, about 5 miles SW from Cape Ugat, is a cliff at the end of a ridge about 2,000 feet high. A peculiar and prominent clump of rocks is on the summit back of the cape.

(736) **Uyak Bay** is on the E side of Shelikof Strait, S of the mountainous peninsula terminating in Capes Ugat and Kuliuk.

(737) The approach between Cape Kuliuk and Rocky Point (see also chart 16598) is about 11 miles wide, E of which the bay converges rapidly to Harvester Island. It extends 25 miles SE from Harvester Island. The shores of the bay rise in steep slopes of 2,000 to 4,000 feet, and have many mountain streams. The only timber is some alders in the gulches and some cottonwoods at the heads of the bays. Uyak Bay is an important salmon fishery. The best anchorage in Uyak Bay is found S of Harvester Island, and in Zachar Bay.

(738) **Chief Point**, on the N shore of Uyak Bay opposite Harvester Island, is formed by a grass-covered island about 90 feet high, and has several ridges and small hills. Several rocks awash are about 0.3 mile W from the NW point of this island. The highest of a group of rocks, known as **Bird Rock**, is 0.5 mile SE from Chief Point and is 110 feet high.

(739) **Chief Cove** is the narrow strait behind the island forming Chief Point. A rock which uncovers 6 feet is in the N entrance. The S entrance is very shoal. Depths of 8 to 12 feet are in the N part of the cove. It is used as an anchorage by cannery tenders during the fishing season.

(740) **Spiridon Bay** opens into Uyak Bay NE of Harvester Island. It extends 12 miles inland in an ESE direction. Broken ground, with a least depth of 4½ fathoms, extends about 0.6 mile NW from the point on the S side of the entrance. The only good anchorages for large vessels in Spiridon Bay are at the head in 13 to 16 fathoms, sand and mud bottom. Care should be taken to avoid the 2¾-fathom shoal 0.3 mile off the E shore and 1.2 miles SE from Telrod Cove. A temporary anchorage can be had in 16 to 18 fathoms about 0.5 mile N from Clover Rock. The bottom is volcanic ash, which has the appearance of yellow sand and has fair holding qualities.

(741) In entering Spiridon Bay from the N, Chief Point should be given a berth of 1 mile. In approaching from the S, the point separating Spiridon and Zachar Bays should not be approached closer than 1 mile to avoid the rock which is nearly 0.5 mile off the point. From a position 1.5 miles S from Chief Point steer **097°** for about 8 miles until Ditto Islets are abeam to starboard, about 0.3 mile. Then change to **135°** and anchor as desired.

(742) **Clover Rock**, 34 feet high, is a rocky islet 0.2 mile off the S shore and 1.5 miles from the S entrance point to Spiridon Bay. It is connected to the mainland by a gravel shoal which bares at minus tides. A large stream enters the bay just E of Clover Rock.

(743) **Thistle Rock** is a small islet consisting of black jagged rocks, about 10 feet high, 0.8 mile NE of Clover Rock. It is always bare and affords a good mark in clear weather. There are three dangerous rocks in the vicinity of the Thistle Rock. One rock, about 250 yards NW of Thistle Rock uncovers 2 feet. The other two are submerged 1.3 and 2.9 fathoms and are about 180 yards E and 440 yards SSW of Thistle Rock, respectively.

(744) **Ditto Islets**, a pair 30 feet high, are in the middle of Spiridon Bay about 7 miles inside the entrance. The bottom between the pair and the S shore is broken and has several rocks awash and a rock 25 feet high. A group of islands in a foul area adjacent to the S shore is SW of the Ditto Islets; of these, Anguk Island is the largest. There are several dangerous rocks, shoals and ledges amongst these islets and between Anguk Island and the S shore. These islands should be given a berth of at least 0.25 mile.

(745) **Telrod Cove** is a small cove on the N side of the bay about 10 miles from Chief Point. It affords good shelter in W weather for small craft. The cove shoals rapidly with mudflats at its head. Anchorage may be had in 7 to 15 fathoms, sand and shell bottom. A large stream enters the bay here.

(746) **Weasel Cove**, which forms the W arm at the head of Spiridon Bay, is 0.3 mile wide and has depths of 5 to 7 fathoms in the middle, sand and mud bottom. The cove is an excellent anchorage for small craft. To enter Weasel Cove keep from 250 to 300 yards off the W shore and enter the cove in midchannel, taking up anchorage as desired.

(747) **Chart 16599.—Harvester Island**, about 9 miles S of Cape Kulink and 0.3 mile off the SW entrance point to Uyak Bay, is over 1 mile long, 844 feet high, steep sided, and grass covered. The 20-fathom curve is about 0.3 mile off the N and E sides of the island, and foul ground extends off the N and E sides for 350 yards in places. A spit, which uncovers and is steep-to, extends

425 yards SW from the S end of the island. **Harvester Island Spit Light 2** (57°38'12"N., 153°59'42"W.), 22 feet above the water, is shown from a red triangular daymark on a dolphin on the end of the spit.

(748) **Bear Island**, 249 feet high and grass covered, is about 0.8 mile W of Harvester Island. It is 0.3 mile from the shore, with which it is connected by a boulder spit that uncovers about 7 feet.

(749) **Uyak Anchorage**, between Harvester Island and the coast to the SW, is one of the best harbors on the E side of Shelikof Strait S of Uganik Bay. It has two entrances of which the S is preferred. The depths range from about 6 fathoms between Harvester Island and Bear Island to 20 fathoms 0.4 mile NNW of Harvester Island Spit Light 2. The best anchorage is about 0.6 mile NNW of the light, in 12 to 14 fathoms. Good anchorage, except with heavy NE or E winds, can be had about 500 yards S of the light 0.3 mile offshore, in 12 to 14 fathoms.

(750) The NW entrance is 0.4 mile wide between two reefs, partly bare at half tide and marked by kelp, one extending 400 yards W from the NW end of Harvester Island, and the other 250 to 550 yards E from Bear Island. With care this entrance is not difficult in the daytime, especially at low water when the principal dangers show above water. Once entrance is made and the reefs are passed, favor the E side of the channel to avoid a 2.7-fathom shoal that is about 0.3 mile SSW of the NW tip of Harvester Island.

(751) The better and safer entrance to the anchorage is around the S end of Harvester Island. **Cormorant Rock**, which uncovers about 7 feet, is about 0.6 mile SSE of Harvester Island and 300 yards offshore.

(752) The native village of **Uyak** and the cannery on the SW side of Uyak Anchorage have been abandoned and are in ruins. There are a few homestead cabins along the shore S of these ruins.

(753) **Tides**.—The diurnal range of tide at Uyak Anchorage is 13.8 feet.

(754) **Routes, Uyak Anchorage**.—From northward, round Cape Ugat about 1.5 miles and steer **220°** for 6 miles to a position 2.5 miles off Cape Kuliuk, bearing 102°. Then steer **172°** for 10 miles, giving the E shore a berth of about 2 miles, to a position 0.5 mile E of Harvester Island. (See chart 16597.)

(755) Then steer **237°**, passing about 0.3 mile SE of Harvester Island. Anchor 500 yards NE or N of the slipways, in 10 to 14 fathoms.

(756) To go to the inner harbor, follow the preceding directions, and then haul NW, round the light at 100 yards, and steer **335°** for the NW end of Harvester Island, pass 150 to 200 yards off the ruins of the cannery wharf at Uyak, and continue the course to midchannel.

(757) **From southward**.—Give Cape Uyak, Rocky Point, and Bear Island berths of 1 mile or over, and follow the E shore of Harvester Island at a distance of 0.5 mile or more. Then follow directions as given above.

(758) In passing Rocky Point care should be taken to avoid Wolcott Reef which is 0.3 mile off the point and bares only at extreme low water.

(759) **Chart 16597.—Zachar Bay**, about 7 miles SE of Harvester Island, is 0.8 mile wide at the entrance and extends SE for 5.5 miles where the bay terminates in an extensive mudflat that uncovers. This mudflat affords an excellent place for beaching a vessel in an emergency.

(760) **Carlsen Point**, the S entrance point to Zachar Bay, is low and appears as a bluff when off the entrance. Care should be taken with several rocks which lie about 200 yards off the N shore of the entrance.

(761) A dangerous rock, covered $2\frac{3}{4}$ fathoms, is 1.6 miles N from Carlsen Point and 0.6 mile offshore.

(762) **Carlsen Reef**, which uncovers 10 feet, is a danger about 0.3 mile NW from the NE tip of Carlsen Point.

(763) A reduction plant is on the N shore of Zachar Bay 3 miles above the entrance. The plant has a wharf with a 100-foot face and a least depth alongside of 18 feet. Large vessels dock port-side-to. Radiotelephone and radiotelegraph communications are maintained. There is also float plane service available from Kodiak.

(764) A large stream, with many cottonwood trees along its sides, enters the head of the bay. Kodiak bears are numerous in the area.

(765) Excellent anchorage sheltered from all winds may be had in 12 to 15 fathoms, mud bottom, off the mudflats at the head of Zachar Bay. The anchorage is subjected to moderate williwaws. In anchoring, care should be taken to avoid the mudflats which extend 1.5 miles from the head of the bay.

(766) In entering Zachar Bay, the shore on the port hand should not be approached closer than 1 mile and a course should be laid to pass 300 yards off the $2\frac{3}{4}$ -fathom rock. From this point steer 127° until Carlsen Point is abeam on the starboard hand, then change to 145° and continue, keeping in midchannel.

(767) **Amook Island**, formed by a mountainous ridge, divides an 8-mile stretch of Uyak Bay into two passages. The E passage is narrow and obstructed in places, and as a through route should be used only by small vessels with local knowledge. Reefs extend 0.3 mile N from the N end of Amook Island.

(768) The ship passage is W of Amook Island. **Aleutian Rock**, marked by a daybeacon on its SW side, is 0.3 mile off the SW shore of Amook Island, in the S end of this passage. This dangerous rock uncovers 1 foot and is not marked by kelp. Vessels should pass between Aleutian Rock and Alf Island. The steamship ALEUTIAN was lost here in 1929.

(769) A cannery is on the W shore of Uyak Bay opposite the S end of Amook Island.

(770) In the bight on the W side of Amook Island, 2.5 miles from its N end, is an anchorage for a small vessel in about 10 fathoms, with shelter from E and S winds. The bottom is uneven with a possibility of dangers. The entrance is between the S point of the bight and a bare rock 0.6 mile N from the point and 0.5 mile from Amook Island. Between this rock and the island is a reef, partly bare at low water, which extends 0.5 mile SE from an islet.

(771) The passage E of Amook Island for about 2.5 miles from its N end has suitable depths and sufficient width for anchoring vessels of moderate size. The passage then narrows to 300 yards, and from the point on the E side a kelp-marked reef extends W and NW more than halfway across, leaving a narrow channel between the reef and the W shore. Near the NW end of the reef is a bare rock. An anchorage for small vessels may be found on the W side of the S end of the narrows, around the point, in 5 to 8 fathoms. A small vessel can also anchor 300 yards off the narrow entrance of the shallow lagoon 0.4 mile NE of the point of the narrows, in 5 to 6 fathoms. A $2\frac{1}{4}$ -fathom spot is about 500 yards off the lagoon entrance.

(772) Thence for 2 miles the passage is clear to the second narrows where a spit, partly bare at low water, extends halfway

across from a low grassy point on the W side and leaves a channel 125 yards wide between the S end of the spit and an island. The channel is W of this island and the next island 0.4 mile S; the W shore should be favored until over 0.2 mile S of the S island. S of this point the passage is clear. Some prospecting has been done on the E side of the passage 2 miles from its S end.

(773) Lying 0.8 to 2.5 miles S of Amook Island is a chain of islands with foul ground between them and about 300 yards off the NW end of **Alf Island**.

(774) The safer and recommended passage is E of the chain composing Alf Island. Broken bottom extends about 300 yards into the passage from the central islets of the chain, and directly opposite, a reef extends 200 yards from the E side of the passage. The reef is marked at its outer end by a bare rock visible at all times.

(775) At the S end of the chain of islands is a small inlet in the W shore about 0.8 mile long and 300 yards wide, affording anchorage in about 12 fathoms.

(776) From 3 to 6 miles S of Alf Island, Uyak Bay shoals gradually from 20 to 4 fathoms and anchorage may be selected in any depth desired. The swinging room is about 1,400 yards in diameter.

(777) The upper end of Uyak Bay is bordered by high snow-covered mountains and is a well-known hunting ground for the large Kodiak brown bear.

(778) **Chart 16599.—Larsen Bay** is on the W side of Uyak Bay, 6 miles S of Harvester Island. Depths inside the bay are 10 to 40 fathoms; the N shore slopes steeply to the flat bottom, while the S shore slopes more gradually. From its head, a trail leads over a low divide to the Karluk River. A large cannery is on the W side of the spit that separates Larsen Bay from Uyak Bay. Gasoline, kerosene, and diesel oil are stored for cannery use and may be purchased. A machine shop is maintained for cannery use, and a store is available for the purchase of food and clothing in small quantities. A small dispensary and first aid station are available but no doctor is in residence. There is a row of public pay telephones S of the cannery office.

(779) The entrance is between a spit extending 150 yards S of the N shore and a 20-foot islet about 150 yards from the S shore. There is a reef in the middle of the entrance that uncovers at low water; a lighted triangular daydeacon is mounted on a pile on the reef. Two narrow crooked channels lead on either side of the reef. The preferred S channel, between the mid-entrance reef and the 20-foot islet, 200 yards SE of it, is marked by a 248° range. The front range is a pile on the flats bearing a circular orange disk, and the rear range is another circular orange disk painted under the gable of a building. This channel has a least depth of 19 feet on the range.

(780) A good anchorage for larger vessels will be found about 600 yards N of the small island on the S side of the bay, and about 800 yards W of the cannery pier. This anchorage is in about 20 fathoms of water with mud bottom. In W weather, the winds blow down the bay with great force. The holding ground is good. On the S side of the small island there is a harbor for small vessels that is bordered by three breakwaters. Depths in the harbor range from 10 to 18 feet.

(781) **Routes.**—Small vessels can enter Larsen Bay at any stage of the tide, but large vessels should choose a high-water slack with calm weather for entering or leaving.

(782) Enter on the range and pass midway between the reef marked by a buoy on the N side and the 20-foot rock, 200 yards S from it. Hold this range, **248°**, until within about 300 yards of the dolphin with the orange disk and then pick up the **291°30'** inner range, passing 100 yards off the end of the spit off the N entrance point and 150 yards off the inner entrance point on the port hand. When the inner S entrance point is a little abaft the beam change to **263°** for 0.3 mile, then haul S and anchor as desired.

(783) **Tides and currents.**—The diurnal range of tide in Larsen Bay is 13.7 feet.

(784) A strong tidal **current** sweeps through the entrance with an estimated velocity of 4 to 5 knots. Steep waves will build at the entrance when strong easterly winds blow opposing the ebb current.

(785) **Pilotage, Larsen Bay.**—Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See Pilotage, general, indexed as such, chapter 3, for details.)

(786) The Kodiak Island area is served by the Alaska Marine Pilots and Southwest Alaska Pilots Association.

(787) Vessels using Southwest Alaska Pilots Association pilots and en route to Larsen Bay can meet the pilot boat about 1 mile E of Harvester Island (57°38.8'N., 153°59.5'W.).

(788) The pilot boat can be contacted by calling "LARSEN BAY PILOT BOAT" on VHF-FM channel 16 or on a prearranged frequency between pilot and agent/vessel.

(789) The **pier** built out over the shoal water is 1,190 feet long and has a depth of 11 feet at its outer end. A 3-ton crane is on the pier. Water is available through a pipeline during the summer months only.

(790) **Chart 16598.—Sevenmile Beach** is the long boulder-strewn beach from Bear Island to Rocky Point. It is backed by low cliffs from which a broad grassy valley extends back several miles toward Karluk Lake.

(791) **Rocky Point** is a double point on the S side of the approach to Uyak Bay. It consists of bold cliffs which rise rapidly to the ridges of which the point is a termination.

(792) **Wolcott Reef**, a dangerous group of rocks that bare at extreme low water, is 0.3 mile off the E spur of Rocky Point. A channel is between the reef and the point and has a least known depth of 4 fathoms. This channel is used by beach seiners in good weather. A buoy is 0.2 mile W of the reef.

(793) **Cape Uyak**, on the E side of Shelikof Strait about 4 miles SW from Rocky Point, is a precipitous high headland at the end of a ridge. From the water the slope rises abruptly to 647 feet. There is then a slight fall to a deep notch in the narrow neck back of the cape, from which there is a rise in steep, grassy slopes to higher land.

(794) **Northeast Harbor** is the bight on the S side of Cape Uyak. In NE weather it affords excellent shelter for small craft that can anchor close under the shore in 3 to 5 fathoms, sandy bottom. Larger vessels anchor farther out in 9 fathoms with some protection but subject to an uncomfortable swell.

(795) Between Cape Uyak and Karluk are two long cliffs about 1,300 feet high, the S one having a marked slide extending from its highest point almost to the water. In the valley between the cliffs are two waterfalls. Beach seining is carried on here during the season, and a number of shacks used by fishermen are on the beach at the foot of the cliffs.

(796) **Chart 16599.—Karluk**, 5.5 miles S from Cape Uyak and 1.5 miles E from Cape Karluk, is a native village with a school and a church. Fishing is the principal industry. Two of the old cannery buildings are still standing next to the river entrance, but they are no longer used, as the fish are now taken to Uyak Bay for canning. A strong set S toward the shoals inshore has been experienced.

(797) Radiotelephone and radiotelegraph communications are maintained.

(798) The entrance to **Karluk River** is through a narrow channel at the S end of a spit and is only passable by launches at high water. About 1.5 miles up the river is a weir where the salmon are counted as they ascend the river. The weir is removed during the winter.

(799) **Karluk Anchorage**, off Karluk, is sheltered from offshore winds but is exposed to winds from the SW around through W to NE. Vessels should be prepared to move on short notice. Anchorage may be had off the town in 12 to 14 fathoms, sandy bottom. During the fishing season a number of scows and launches are usually found moored in the roadstead.

(800) The abandoned cannery buildings and the church spire are the principal objects to be seen in approaching Karluk.

(801) **Tanglefoot Bay** is the bight adjacent to Cape Karluk on its E side. It is separated from Karluk by a high cliff, the base of which is not passable by pedestrians at high water. **Tanglefoot Beach** is very steep and has a bad undertow. Landing here is dangerous if there is any surf.

(802) **Chart 16598.—Cape Karluk** is the most conspicuous landmark along the W coast of Kodiak Island. The cape is a prominent, projecting head, 1,420 feet high, with bare rock cliffs on its seaward face and grassy slopes on its E side to lowland. It is readily identified by its cone-shaped appearance, a notch in the summit, and the lowland behind it.

(803) **Sturgeon River** has its mouth about 2 miles S from Cape Karluk. The entrance is between 2 shingle spits covered with driftwood. It can be entered by small boats at half tide or better. For about 1 mile back of the beach the river flows through a mud-flat, which is covered at high water.

(804) **Sturgeon Head** is a high whitish eroded headland 5 miles SW from Cape Karluk. Several rocks and reefs are as much as 200 yards offshore at the foot of Sturgeon Head.

(805) **Cape Grant**, about 10 miles SSW of Cape Karluk, is a rugged headland at the end of a high ridge, the summit of which is marked by a small cluster of peculiar pinnacle rocks.

(806) A rock nearly awash at low water is 0.3 mile off the SW tip of Cape Grant. Shoal water extends some distance beyond this rock and vessels rounding the cape into Halibut Bay should give it a berth of 0.8 mile.

(807) **Halibut Bay** is the large bight just SW from Cape Grant. The bight is bordered by eroded bluffs and a broad sand beach. A stream enters the sea at the S part of Halibut Bay. Vessels anchor in 7 fathoms, hard sand bottom, 0.8 mile off the beach. Small craft may find more protection closer in near the mouth of the lagoon.

(808) Anchorage is also available in the N corner of the bay, but care should be taken to avoid the reef which makes out from the SW tip of Cape Grant.

(809) An abandoned cannery is at the S end of Halibut Bay at the entrance to the lagoon; the cannery wharf dries at low water.

(810) **Middle Cape**, the westernmost promontory on Kodiak Island, consists of two headlands having precipitous, rocky cliffs facing the sea, and smooth grassy slopes facing inland. The N headland is the higher, a little over 1,000 feet. Its summit consists of three rocky clumps, the middle one of which is the highest. These rocky clumps are prominent and easily distinguished from the N.

(811) A prominent high pinnacle rock is at the foot of the N slope of Middle Cape.

(812) **Tombstone Rocks** consist of two detached rocks about 100 yards apart 0.8 mile off Middle Cape. The S rock is 99 feet high while the N rock is only a few feet high. From some directions these rocks appear as the headstone and footstone of a grave. Deep water is close to the rocks.

(813) **Mushroom Reef**, which uncovers 13 feet, is about 0.3 mile offshore and 1 mile SE from Middle Cape. This rock when exposed by the tide is round and has the appearance of a huge mushroom. Deep water is close up to it.

(814) A prominent pillarlike shaft of rock, 170 feet high, with overhanging sides, is about 100 yards offshore and E from Mushroom Reef.

(815) **Middle Bay** is a small bight about midway between Middle Cape and Cape Ikolik. The 5-fathom curve is about 0.3 mile off the beach.

(816) **Gurney Bay** is the bay immediately NE from Cape Ikolik. The head of the bay is shoal with a sand beach strewn with boulders. Anchorage may be had in 10 fathoms, sandy bottom, midway between the two entrance points. This is a comfortable and secure anchorage in E weather.

(817) **Chart 16601.—Cape Ikolik**, 4 miles S of Middle Cape, is a rugged headland 1,008 feet high, with its summit forming a ridge lying in a NE and SW direction.

(818) **Outer Seal Rock**, 1.8 miles W from Cape Ikolik, resembles a sail and is 89 feet high. The rock has deep water close to except about 200 yards to the SW where there are submerged rocks. Outer Seal Rock is a sea lion rookery.

(819) **Inner Seal Rock**, 0.3 mile W from Cape Ikolik, is a steep-sided bare rock 125 feet high, surmounted by a rocky nub which gives it the appearance of a lighthouse. From some directions it appears as a huge bell.

(820) **Bumble Bay** is 2.5 miles E of Cape Ikolik. The W point of the bay is marked by three pinnacle rocks, while the E point is marked by a single pinnacle rock 127 feet high. Small craft will find shelter from E winds in the E part of the bay, while large vessels will find anchorage in the center of the bay in 12 fathoms, sand bottom.

(821) **Ayakulik Island**, 5 miles SE of Bumble Bay, is small and 220 feet high. A reef extends E from the E point of the island to a

sandspit on the mainland of Kodiak Island. About 300 yards W and N of the island are bare rocks and rocks awash.

(822) Small launches will find shelter in SE or E weather in 5 fathoms, 300 yards NE of the island. Larger vessels will find shelter from E weather in 7 fathoms, 0.5 mile N of the island.

(823) **Ayakulik River**, known locally as **Red River**, discharges at a point 1.8 miles SE of Ayakulik Island. With local knowledge, the river can be entered at high tide in smooth weather by small launches. The Fish and Wildlife Service maintains a station here during the salmon season.

(824) From a point 3 miles N of Ayakulik Island to Low Cape, the shoreline runs in a nearly N-S direction and is marked by earth bluffs varying from a few feet to 267 feet high.

(825) **Ikpik Hill**, a prominent high dark-colored earth bluff is 3.2 miles N of Low Cape, and in approaching from Cape Ikolik, this bluff may be mistaken by a stranger for Low Cape.

(826) **Low Cape**, 11.5 miles NW from Cape Alitak, is the W extremity of the lowland in this vicinity. The extremity of the cape is marked by a peak-shaped light-colored earth bluff about 90 feet high. A spit, bare at low water, extends nearly 0.3 mile off the cape. The water deepens gradually, the 10-fathom curve lying 2.3 miles off the cape.

(827) From a position 2 miles W of Low Cape, heavy kelp extends ESE. Soundings in this kelp showed depths of from 3 to 7 fathoms, but much shoaler water probably exists. Low Cape should be given a berth of about 3 miles.

(828) **Sukhoi Bay** has its entrance about 6 miles S of Low Cape. The entrance is narrow and is between two sandbars. It has a depth of about 6 feet, but should not be attempted except with local knowledge.

(829) The coast from Low Cape to Cape Alitak apparently has no off-lying dangers.

(830) Cape Alitak has been described earlier in this chapter.

(831) **Routes, Cape Karluk to Cape Alitak.**—From a point 2 miles off Cape Karluk (see chart 16598), steer **222°** for 5.5 miles to a position with Sturgeon Head (a high white eroded cliff) abeam. Then change to **213°** for 11.5 miles until Tombstone Rock is on the port beam, 2 miles.

(832) Then change to **196°** for 4 miles or until Outer Seal Rock (a sail-shaped pinnacle) is a little abaft the beam, 2 miles.

(833) Then change to **154°** for 23.3 miles to pass 2.8 miles off Low Cape. On this course Low Cape should be passed in a depth of 14 fathoms.

(834) When Low Cape bears **083°**, 3 miles, haul to **132°** for 12.5 miles, passing about 1.3 miles off Cape Alitak, to a position with the cape bearing **010°**, 1.5 miles.

(835) If bound to Alitak Bay, follow routes given in the description of that place.